

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal743mxc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	4	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	5	MAR 02	GBFULL: New full-text patent database on STN
NEWS	6	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	9	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	10	MAR 22	PATDPASPC - New patent database available
NEWS	11	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	12	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	13	APR 04	EMBASE - Database reloaded and enhanced
NEWS	14	APR 18	New CAS Information Use Policies available online
NEWS	15	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	16	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS
NEWS	17	MAY 23	GBFULL enhanced with patent drawing images
NEWS	18	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	19	JUN 06	STN Patent Forums to be held in June 2005
NEWS	20	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available
NEWS	21	JUN 13	RUSIAPAT: New full-text patent database on STN
NEWS	22	JUN 13	RUFULL enhanced with patent drawing images
NEWS	23	JUN 20	MEDICONF to be removed from STN
NEWS EXPRESS			JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 13:37:49 ON 26 JUN 2005

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:38:35 ON 26 JUN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 JUN 2005 HIGHEST RN 852980-90-6

DICTIONARY FILE UPDATES: 24 JUN 2005 HIGHEST RN 852980-90-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

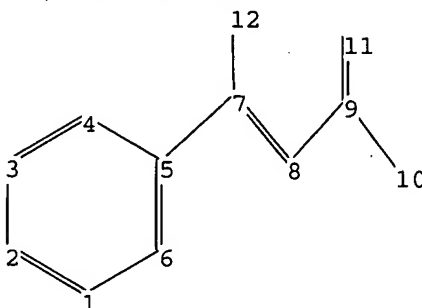
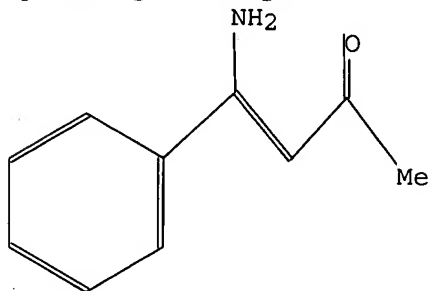
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10658754.str



chain nodes :

7 8 9 10 11 12

ring nodes :

1 2 3 4 5 6

chain bonds :  
 5-7 7-8 7-12 8-9 9-10 9-11  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6  
 exact/norm bonds :  
 7-12 9-11  
 exact bonds :  
 5-7 7-8 8-9 9-10  
 normalized bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6

Match level :

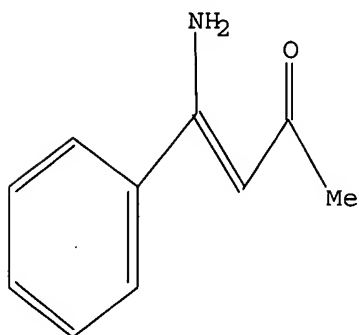
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS  
 11:CLASS 12:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 13:38:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3592 TO ITERATE

100.0% PROCESSED 3592 ITERATIONS

59 ANSWERS

SEARCH TIME: 00.00.01

L2 59 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

161.54

FILE 'CAPLUS' ENTERED AT 13:38:57 ON 26 JUN 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available

for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 26 Jun 2005 VOL 143 ISS 1  
FILE LAST UPDATED: 24 Jun 2005 (20050624/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

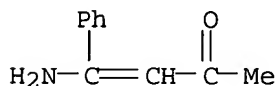
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2  
L3 47 L2

=> s l3 and (formaldehyde)  
135314 FORMALDEHYDE  
371 FORMALDEHYDES  
135419 FORMALDEHYDE  
(FORMALDEHYDE OR FORMALDEHYDES)  
L4 3 L3 AND (FORMALDEHYDE)

=> d l4 hitstr, ibib, iabs

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 14088-41-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(in preparation of detection reagent for color-production-type indoor-air formaldehyde detectors)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2004:451033 CAPLUS  
DOCUMENT NUMBER: 140:427959  
TITLE: Color-production-type indoor-air **formaldehyde** detectors  
INVENTOR(S): Nakano, Nobuo; Kawabe, Tetsuya; Terauchi, Yasuhiro; Suzuki, Koji  
PATENT ASSIGNEE(S): Riken Keiki Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004157103	A2	20040603	JP 2003-58197	20030305
US 2004197225	A1	20041007	US 2003-658754	20030910
PRIORITY APPLN. INFO.:			JP 2002-263713	A 20020910

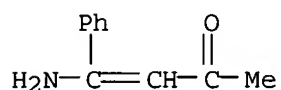
ABSTRACT:

Silica gel-containing planar substrates are impregnated with color-producing solns. containing 4-amino-4-phenyl-3-en-2-one compds. and buffer solns. and then subjected

to vaporizing solvents to give the **formaldehyde** detectors. The detectors show high sensitivity and quick response.

=> d 14 hitstr, ibib, iabs 2, 3

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
IT **14088-41-6**  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(colorimetric reagents for determination of **formaldehyde** in air)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



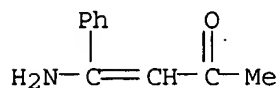
ACCESSION NUMBER: 2003:884712 CAPLUS  
DOCUMENT NUMBER: 140:63776  
TITLE: Portable Sick House Syndrome Gas Monitoring System  
Based on Novel Colorimetric Reagents for the Highly  
Selective and Sensitive Detection of  
**Formaldehyde**  
AUTHOR(S): Suzuki, Yoshio; Nakano, Nobuo; Suzuki, Koji  
CORPORATE SOURCE: Regional Entities for the Advancement of Technological  
Excellence (CREATE), Kanagawa Academy of Science and  
Technology, Kawasaki, Kanagawa, 213-0012, Japan  
SOURCE: Environmental Science and Technology (2003), 37(24),  
5695-5700  
CODEN: ESTHAG; ISSN: 0013-936X  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

**Formaldehyde** (HCHO) emitted from the furniture and the walls in the rooms injures the eyes, nose, and respiratory organs and causes allergies, which is called sick house syndrome. We designed and synthesized novel colorimetric HCHO-sensing mols. (KD-XA01 and KD-XA02) which possess an enamnone structure and developed a hand-held instrument to monitor indoor HCHO gas with the use of KD-XA01. These sensing mols. produced speedy color changes from colorless to yellow under mild conditions, which was caused by the fact that the enamnone structure in the reagent reacts with HCHO to give a lutidine derivative. This reaction took place not only in the solution phase but also in the solid phase (surface of the cellulose paper). To take advantage of this phenomena, a handy and rapid monitoring system has been developed for detecting indoor HCHO gas using a highly sensitive and selective detection tablet constructed from the porous cellulose paper that contains silica gel as an adsorbent, KD-XA01, and phosphoric acid under optimum conditions. This instrument detected the surface color change of the tablet from white to yellow, which was monitored as a function of the intensity of the reflected light illuminated by an LED (475 nm). The response was proportional to the HCHO concentration at a constant sampling time and flow rate; 0.05 ppm HCHO, which is under the standard value set by the World Health Organization, was able to be detected in 5 min. The detection limit was 0.005 ppm. This monitoring system was not interfered by carbonyl compds. such as acetaldehyde and acetone, alcs., hydrocarbons, and typical gases such as carbon monoxide, carbon dioxide, nitrogen dioxide, etc., which contributes to the measurement of correct HCHO concns. It was possible to monitor the HCHO gas in the room of a new apartment and school using this instrument; the response values were in good agreement with those obtained by the standard DNPH method. This highly sensitive, selective,

and handy HCHO gas monitor is widely applicable and convenient for users who are not specialists in this field.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 14088-41-6P  
RL: ARG (Analytical reagent use); IMF (Industrial manufacture); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(aromatic amine anal. reagent for detection or determination of formaldehyde in indoor air)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



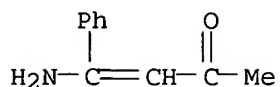
ACCESSION NUMBER: 2003:568771 CAPLUS  
DOCUMENT NUMBER: 139:127084  
TITLE: Analytical reagent and its use in method for detection or determination of formaldehyde  
INVENTOR(S): Suzuki, Koji; Suzuki, Sachio  
PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan; Kanagawa Academy of Science and Technology  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003207498	A2	20030725	JP 2002-7885	20020116
PRIORITY APPLN. INFO.:			JP 2002-7885	20020116
OTHER SOURCE(S):	MARPAT	139:127084		

ABSTRACT:  
The reagent contains R22NC(Ar):CHC(O)R1 [R1 = H, C1-10 linear or branched alkyl, (un)substituted Ph; R2 = H, C1-10 linear or branched alkyl; Ar = (un)substituted Ph, naphthyl, anthracenyl]. The above compound may be fixed on filter paper. HCHO is measured by bringing the agent into contact with a sample and detecting or determining the formed colorant. The agent is suitable for HCHO anal. in indoor air.

=> d l3 hitstr, ibib, iabs 1-47

L3 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 14088-41-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(azo coupling; solution and solid state structure and tautomerism of azo coupled enamnone derivs. of benzoylacetone)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)

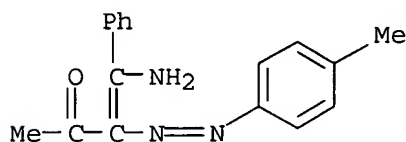


IT 849926-45-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(crystallog.; solution and solid state structure and tautomerism of azo coupled enaminone derivs. of benzoylacetone)

RN 849926-45-0 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[(4-methylphenyl)azo]-4-phenyl- (9CI) (CA INDEX NAME)

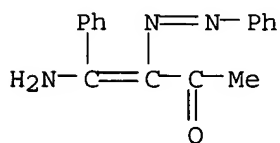


IT 849926-46-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(solution and solid state structure and tautomerism of azo coupled enaminone derivs. of benzoylacetone)

RN 849926-46-1 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl-3-(phenylazo)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2005:246001 CAPLUS

DOCUMENT NUMBER: 142:392052

TITLE: Solution and solid state structure and tautomerism of azo coupled enaminone derivatives of benzoylacetone  
AUTHOR(S): Simunek, Petr; Bertolasi, Valerio; Peskova, Marketa; Machacek, Vladimir; Lycka, Antonin  
CORPORATE SOURCE: University of Pardubice, Pardubice, CZ-532 10, Czech Rep.

SOURCE: Organic & Biomolecular Chemistry (2005), 3(7), 1217-1226

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

The reaction of 4-substituted benzenediazonium tetrafluoroborates with 3-amino-1-phenylbut-2-en-1-one, 4-amino-4-phenylbut-3-en-2-one and their N-aryl derivs. has been used to prepare the resp. azo coupling products. Tautomerism of the azo coupling products prepared has been investigated in CDCl<sub>3</sub> solns. by means of <sup>1</sup>H, <sup>13</sup>C and <sup>15</sup>N NMR spectra. Crystal structures of selected products have also been investigated by means of X-ray diffraction.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

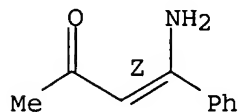
IT 95514-24-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(reaction of 3-phenylisoxazole with alkyllithiums)

RN 95514-24-2 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl-, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 2005:162254 CAPLUS

DOCUMENT NUMBER: 142:391962

TITLE: Reaction of 3-phenylisoxazole with alkyllithiums

AUTHOR(S): Di Nunno, Leonardo; Scilimati, Antonio; Vitale, Paola

CORPORATE SOURCE: Dipartimento Farmaco-Chimico, Universita degli Studi di Bari, Bari, 70125, Italy

SOURCE: Tetrahedron (2005), 61(10), 2623-2630

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

Alkyllithiums react with 3-phenylisoxazole giving C5-H abstraction followed either mainly by ring fragmentation to benzonitrile and ethynolate ion (in the case of t-BuLi) or (less hindered alkyllithiums: n-BuLi, EtLi, MeLi) also by formation of alkylated enamines. Appreciable amts. of 2-alkyl-4,6-diphenylpyrimidines have also been isolated for certain alkyllithiums (EtLi and MeLi). This is at variance with the reported behavior with hindered lithium amides (LTMP) for which only C5-H abstraction followed by ring fragmentation was described. The mechanistic significance of the observed results is discussed.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 95514-24-2P 798555-51-8P 798555-72-3P

798555-73-4P 798555-74-5P

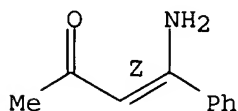
RL: SPN (Synthetic preparation); PREP (Preparation)

(stereoselective preparation of (isoxazolyl)(hydroxy) esters, enamines, pyridones and dihydrofuranones via catalytic hydrogenation of Baylis-Hillman adducts of isoxazolecarboxaldehydes or their acetates)

RN 95514-24-2 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl-, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

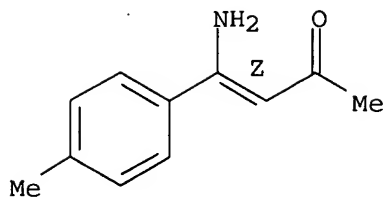


RN 798555-51-8 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-methylphenyl)-, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

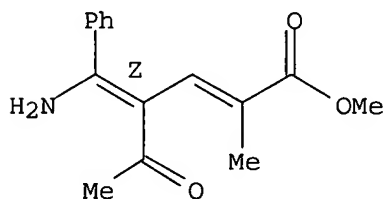




RN 798555-72-3 CAPLUS

CN 2-Hexenoic acid, 4-(aminophenylmethylene)-2-methyl-5-oxo-, methyl ester, (4Z)- (9CI) (CA INDEX NAME)

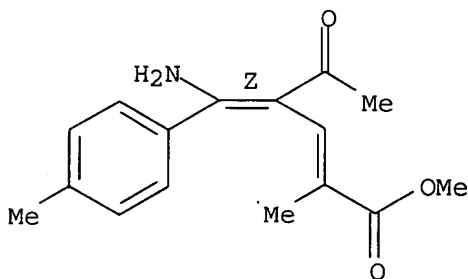
Double bond geometry as described by E or Z.



RN 798555-73-4 CAPLUS

CN 2-Hexenoic acid, 4-[amino(4-methylphenyl)methylene]-2-methyl-5-oxo-, methyl ester, (4Z)- (9CI) (CA INDEX NAME)

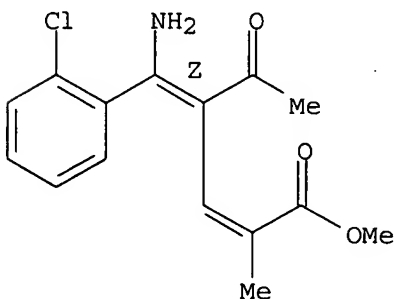
Double bond geometry as described by E or Z.



RN 798555-74-5 CAPLUS

CN 2-Hexenoic acid, 4-[amino(2-chlorophenyl)methylene]-2-methyl-5-oxo-, methyl ester, (4Z)- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



ACCESSION NUMBER:

2004:815667 CAPLUS

DOCUMENT NUMBER:

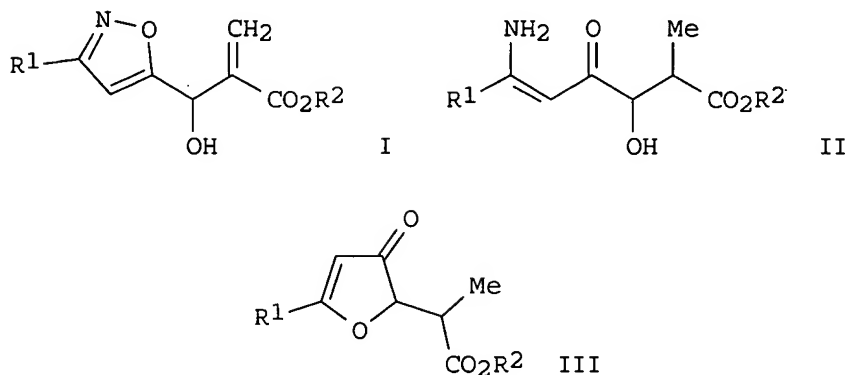
142:6460

TITLE:

Studies on the catalytic hydrogenation of

Baylis-Hillman derivatives of substituted  
isoxazolecarbaldehydes. Unusual retention of isoxazole  
ring during Pd-C-promoted hydrogenation of  
Baylis-Hillman adducts

AUTHOR(S): Saxena, R.; Singh, V.; Batra, S.  
CORPORATE SOURCE: Medicinal Chemistry Division, Central Drug Research  
Institute, Lucknow, 226 001, India  
SOURCE: Tetrahedron (2004), 60(45), 10311-10320  
CODEN: TETRAB; ISSN: 0040-4020  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 142:6460  
GRAPHIC IMAGE:



ABSTRACT:

Results of the catalytic hydrogenation of Baylis-Hillman adducts obtained from substituted 3-, 4- and 5-isoxazolecarboxaldehydes, e.g. I (R1 = Ph, 4-MeC6H4, 2-ClC6H4, 4-ClC6H4; R2 = Me, Et), and their acetates in the presence of Raney-Ni and Pd-C are presented. The hydrogenation of Baylis-Hillman adducts of substituted 5-isoxazolecarboxaldehydes and 3-isoxazolecarboxaldehydes in the presence of Raney-Ni furnishes diastereoselectively enaminones, e.g. II from I, favoring the syn diastereomer over the anti and in the presence of boric acid as an additive further enhancement of diastereoselectivity in favor of syn isomer is observed. The Pd-C-promoted hydrogenation of these substrates is also diastereoselective in favor of syn isomer but occurs without the hydrogenolysis of isoxazole-ring. The presence of boric acid as an additive in this hydrogenation exhibits no pronounced effect on diastereoselectivity. The Raney-Ni-mediated hydrogenation of Baylis-Hillman adducts of substituted 4-isoxazolecarboxaldehydes yield pyridone derivs. and Pd-C-promoted hydrogenation of the same substrate is diastereoselective to afford the anti isomers. The enaminones derived from Baylis-Hillman adducts of 3- and 5-isoxazolecarboxaldehydes serve as versatile precursors for  $\alpha'$ -hydroxy-1,3-diketones, which undergo acid-catalyzed ring-closure reaction to afford the furanone derivs., e.g. III, in excellent yields.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

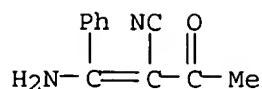
IT 33831-49-1 756531-37-0

RL: RCT (Reactant); RACT (Reactant or reagent)

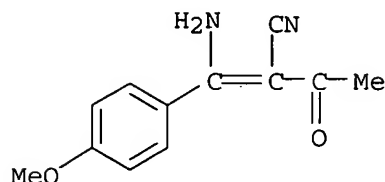
(preparation of 3,5-disubstituted-4-isothiazolecarbonitriles starting from  
 $\alpha$ -cyano- $\beta$ -enaminones via oxidative cyclization of thiones)

RN 33831-49-1 CAPLUS

CN Butanenitrile, 2-(aminophenylmethylene)-3-oxo- (9CI) (CA INDEX NAME)



RN 756531-37-0 CAPLUS  
CN Butanenitrile, 2-[amino(4-methoxyphenyl)methylene]-3-oxo- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2004:574585 CAPLUS  
DOCUMENT NUMBER: 141:260612  
TITLE: Synthesis of novel 3,5-disubstituted-4-isothiazolecarbonitriles  
AUTHOR(S): Mishra, Manisha; Dutta Chowdhury, S. K.; Mahalanabis, Kumar K.  
CORPORATE SOURCE: Department of Chemistry, Jadavpur University, Kolkata, India  
SOURCE: Synthetic Communications (2004), 34(14), 2681-2689  
CODEN: SYNCAV; ISSN: 0039-7911  
PUBLISHER: Marcel Dekker, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 141:260612

ABSTRACT:  
α-Cyano-β-enaminones, obtained by regioselective acylation of β-enaminonitriles, were smoothly converted to thiones which on oxidative cyclization afforded 3,5-disubstituted-4-isothiazolecarbonitriles in good to excellent yields.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

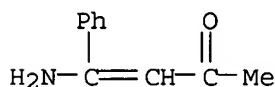
L3 ANSWER 5 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(in preparation of detection reagent for color-production-type indoor-air formaldehyde detectors)

RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2004:451033 CAPLUS  
DOCUMENT NUMBER: 140:427959  
TITLE: Color-production-type indoor-air formaldehyde detectors  
INVENTOR(S): Nakano, Nobuo; Kawabe, Tetsuya; Terauchi, Yasuhiro; Suzuki, Koji  
PATENT ASSIGNEE(S): Riken Keiki Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: Japanese  
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004157103	A2	20040603	JP 2003-58197	20030305
US 2004197225	A1	20041007	US 2003-658754	20030910
PRIORITY APPLN. INFO.:			JP 2002-263713	A 20020910

ABSTRACT:

Silica gel-containing planar substrates are impregnated with color-producing solns. containing 4-amino-4-phenyl-3-en-2-one compds. and buffer solns. and then subjected to vaporizing solvents to give the formaldehyde detectors. The detectors show high sensitivity and quick response.

L3 ANSWER 6 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 698366-92-6

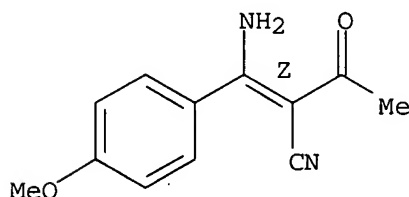
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyrazoles by regiospecific cyclocondensation of  $\alpha$ -cyano- $\beta$ -enaminones with phenylhydrazine)

RN 698366-92-6 CAPLUS

CN Butanenitrile, 2-[amino(4-methoxyphenyl)methylene]-3-oxo-, (2Z)- (9CI)  
(CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 2004:265911 CAPLUS

DOCUMENT NUMBER: 141:23468

TITLE: A short and expeditious regiospecific synthesis of novel pyrazoles

AUTHOR(S): Dutta Chowdhury, S. K.; Sarkar, Mili; Mahalanabis, Kumar K.

CORPORATE SOURCE: Jogesh Chandra Choudhuri College, Kolkata, 700 033, India

SOURCE: Journal of Chemical Research, Synopses (2003), (11), 746-748

CODEN: JRPSDC; ISSN: 0308-2342

PUBLISHER: Science Reviews

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:23468

ABSTRACT:

$\alpha$ -Cyano- $\beta$ -enaminones, obtained by regioselective acylation of  $\beta$ -aminocrotononitrile, are smoothly and regiospecifically converted into substituted pyrazoles in good to excellent yields.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 654061-92-4P

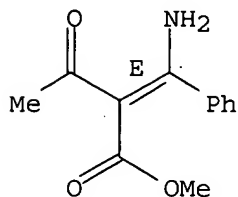
RL: BYP (Byproduct); PRP (Properties); PREP (Preparation)

(stereoselective preparation of arylacylaminoacrylates)

RN 654061-92-4 CAPLUS

CN Butanoic acid, 2-(aminophenylmethylene)-3-oxo-, methyl ester, (2E)- (9CI)  
(CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 2004:101118 CAPLUS  
DOCUMENT NUMBER: 140:163584  
TITLE: Preparation of (E)- $\beta$ -aryl- $\beta$ -acylaminoacrylates  
INVENTOR(S): Heller, Detlef; Drexler, Hans-Joachim; You, Jingsong; Zhang, Songlin  
PATENT ASSIGNEE(S): DSM Ip Assets B.V., Neth.  
SOURCE: PCT Int. Appl., 62 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011414	A1	20040205	WO 2003-NL544	20030725
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: DE 2002-10235916 A 20020726

OTHER SOURCE(S): CASREACT 140:163584; MARPAT 140:163584

ABSTRACT:

R2CONR3CR1C:CHCO2R [R, R2 = H, (substituted) alkyl, aryl, heteroaryl; R1 = (substituted) aryl, heteroaryl; R3 = H, (substituted) alkyl, acyl, aryl, heteroaryl], were prepared. Thus, 3-amino-3-phenylacrylic acid Me ester and pyridine in THF at -78° were treated with AcCl; within 30 min, the reaction mixture was heated to 0° and stirred for further 8 h. It was stirred for 16 h at room temperature, cooled to 0°, treated with AcCl, and stirred for a further 8 h to give 20.2% pure Me (E)-3-acetamido-3-phenyl-2-propenoate after recrystn.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

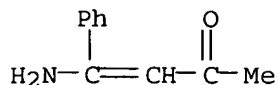
L3 ANSWER 8 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (colorimetric reagents for determination of formaldehyde in air)

RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2003:884712 CAPLUS  
 DOCUMENT NUMBER: 140:63776  
 TITLE: Portable Sick House Syndrome Gas Monitoring System Based on Novel Colorimetric Reagents for the Highly Selective and Sensitive Detection of Formaldehyde  
 AUTHOR(S): Suzuki, Yoshio; Nakano, Nobuo; Suzuki, Koji  
 CORPORATE SOURCE: Regional Entities for the Advancement of Technological Excellence (CREATE), Kanagawa Academy of Science and Technology, Kawasaki, Kanagawa, 213-0012, Japan  
 SOURCE: Environmental Science and Technology (2003), 37(24), 5695-5700  
 CODEN: ESTHAG; ISSN: 0013-936X  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

Formaldehyde (HCHO) emitted from the furniture and the walls in the rooms injures the eyes, nose, and respiratory organs and causes allergies, which is called sick house syndrome. We designed and synthesized novel colorimetric HCHO-sensing mols. (KD-XA01 and KD-XA02) which possess an enaminone structure and developed a hand-held instrument to monitor indoor HCHO gas with the use of KD-XA01. These sensing mols. produced speedy color changes from colorless to yellow under mild conditions, which was caused by the fact that the enaminone structure in the reagent reacts with HCHO to give a lutidine derivative. This reaction took place not only in the solution phase but also in the solid phase (surface of the cellulose paper). To take advantage of this phenomena, a handy and rapid monitoring system has been developed for detecting indoor HCHO gas using a highly sensitive and selective detection tablet constructed from the porous cellulose paper that contains silica gel as an adsorbent, KD-XA01, and phosphoric acid under optimum conditions. This instrument detected the surface color change of the tablet from white to yellow, which was monitored as a function of the intensity of the reflected light illuminated by an LED (475 nm). The response was proportional to the HCHO concentration at a constant sampling time and flow rate; 0.05 ppm HCHO, which is under the standard value set by the World Health Organization, was able to be detected in 5 min. The detection limit was 0.005 ppm. This monitoring system was not interfered by carbonyl compds. such as acetaldehyde and acetone, alcs., hydrocarbons, and typical gases such as carbon monoxide, carbon dioxide, nitrogen dioxide, etc., which contributes to the measurement of correct HCHO concns. It was possible to monitor the HCHO gas in the room of a new apartment and school using this instrument; the response values were in good agreement with those obtained by the standard DNPH method. This highly sensitive, selective, and handy HCHO gas monitor is widely applicable and convenient for users who are not specialists in this field.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

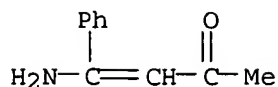
IT 14088-41-6P

RL: ARG (Analytical reagent use); IMF (Industrial manufacture); ANST (Analytical study); PREP (Preparation); USES (Uses)

(aromatic amine anal. reagent for detection or determination of formaldehyde in indoor air)

RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



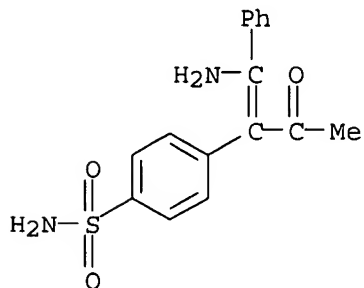
ACCESSION NUMBER: 2003:568771 CAPLUS  
 DOCUMENT NUMBER: 139:127084  
 TITLE: Analytical reagent and its use in method for detection or determination of formaldehyde  
 INVENTOR(S): Suzuki, Koji; Suzuki, Sachio  
 PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan; Kanagawa Academy of Science and Technology  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003207498	A2	20030725	JP 2002-7885	20020116
PRIORITY APPLN. INFO.:			JP 2002-7885	20020116
OTHER SOURCE(S):		MARPAT 139:127084		

ABSTRACT:

The reagent contains  $\text{R}_2\text{NC}(\text{Ar}):\text{CHC}(\text{O})\text{R}_1$  [ $\text{R}_1 = \text{H}$ , C1-10 linear or branched alkyl, (un)substituted Ph;  $\text{R}_2 = \text{H}$ , C1-10 linear or branched alkyl;  $\text{Ar} =$  (un)substituted Ph, naphthyl, anthracenyl]. The above compound may be fixed on filter paper.  $\text{HCHO}$  is measured by bringing the agent into contact with a sample and detecting or determining the formed colorant. The agent is suitable for  $\text{HCHO}$  anal. in indoor air.

L3 ANSWER 10 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 603151-45-7  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (pharmacokinetics and metabolism of valdecoxib in mice)  
 RN 603151-45-7 CAPLUS  
 CN Benzenesulfonamide, 4-[1-(aminophenylmethylene)-2-oxopropyl]- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2003:253158 CAPLUS  
 DOCUMENT NUMBER: 139:254694  
 TITLE: Pharmacokinetics and metabolism of a COX-2 inhibitor, valdecoxib, in mice  
 AUTHOR(S): Zhang, Ji Y.; Yuan, Josh J.; Wang, Yue-Fen; Bible, Roy H., Jr.; Breau, Alan P.  
 CORPORATE SOURCE: Global Drug Metabolism, Pharmacia, Skokie, IL, 60077, USA

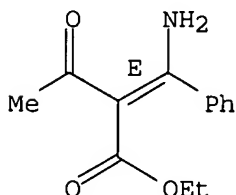
SOURCE: Drug Metabolism and Disposition (2003), 31(4), 491-501  
CODEN: DMDSAI; ISSN: 0090-9556  
PUBLISHER: American Society for Pharmacology and Experimental  
Therapeutics  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ABSTRACT:

The pharmacokinetics and metabolism of valdecoxib, a potent cyclooxygenase-2 selective inhibitor, were investigated in mice. Valdecoxib was extensively metabolized after a single 5 mg/kg oral administration of [<sup>14</sup>C]valdecoxib and elimination of unchanged drug was minor (less than 1%) in male and female mice. The total mean percentage of administered radioactive dose recovered was 99.8% in the male mice and 94.7% in the female mice. Sixteen metabolites were identified in mouse plasma, red blood cells, urine, and feces. The main phase I metabolic pathway of valdecoxib in mice involved the oxidation of the 5-Me group to form the active hydroxymethyl metabolite M1. M1 was further oxidized to the carboxylic acid metabolite M4, which underwent opening of the isoxazole ring to form M6 and M13. Phase II metabolism included glucuronide, glucoside, and Me sulfone conjugations. M1 was also conjugated with glucuronic acid and glucose to yield M-G and M1-glucose, resp. Three novel methylsulfone conjugates M20, M21, and M21-G were detected in blood or urine. Valdecoxib and M1 were the major radioactive components in plasma and red blood cells. The plasma area under the curve from zero to infinity (AUC<sub>0-∞</sub>) values for valdecoxib and M1 were 3.58 and 0.850 μg·h/mL in males and 2.08 and 1.63 μg·h/mL in females, resp. The RBC AUC<sub>0-∞</sub> values for valdecoxib and M1 were 12.1 and 22.6 μg·h/g in males and 6.42 and 35.2 μg·h/g in females, resp.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 495417-87-3, Ethyl (E)-2-acetyl-3-amino-3-phenyl-2-propylenoate  
RL: PRP (Properties)  
(crystal structure of)  
RN 495417-87-3 CAPLUS  
CN Butanoic acid, 2-(aminophenylmethylene)-3-oxo-, ethyl ester, (2E)- (9CI)  
(CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 2002:911881 CAPLUS  
DOCUMENT NUMBER: 138:161351  
TITLE: Ethyl (E)-2-acetyl-3-amino-3-phenyl-2-propylenoate  
AUTHOR(S): Chen, Xuanhua; Guo, Rongwei; Zhou, Zhongyuan  
CORPORATE SOURCE: Department of Chemistry, Central China Normal  
University, Wuhan, Peop. Rep. China  
SOURCE: Acta Crystallographica, Section E: Structure Reports  
Online (2002), E58(12), o1423-o1424  
CODEN: ACSEBH; ISSN: 1600-5368  
URL: <http://journals.iucr.org/e/issues/2002/12/00/ww6053/index.html>  
PUBLISHER: International Union of Crystallography  
DOCUMENT TYPE: Journal; (online computer file)  
LANGUAGE: English



ABSTRACT:

The title compound, C<sub>13</sub>H<sub>15</sub>NO<sub>3</sub>, is an E isomer and the Ph ring does not conjugate with C=C. Both intra- and intermol. N-H...O H bonds are found, and the infinite mol. chains stretch along the b axis. Crystallog. data are given.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

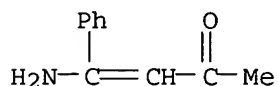
L3 ANSWER 12 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6 231301-47-6 231301-48-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(regioselective preparation of pyrazoles from β-amino enones and hydrazines)

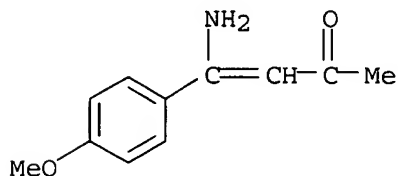
RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



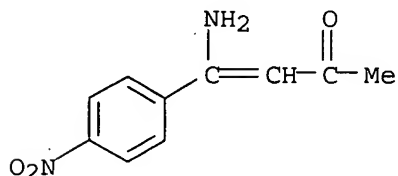
RN 231301-47-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 231301-48-7 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2001:151148 CAPLUS

DOCUMENT NUMBER: 134:340457

TITLE: Scope and limitations in the regioselective synthesis of 1,3,5-trisubstituted pyrazoles from β-amino enones and hydrazine derivatives. 13C-chemical shift prediction rules for 1,3,5-trisubstituted pyrazoles

AUTHOR(S): Alberola, Angel; Bleye, Luis Calvo; Gonzalez-Ortega, Alfonso; Sadaba, M. Luisa; Sanudo, M. Carmen

CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Ciencias, Universidad de Valladolid, Valladolid, 47005, Spain

SOURCE: Heterocycles (2001), 55(2), 331-351

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:340457

ABSTRACT:

$\beta$ -Amino enones react with hydrazines to give regioselectively 1,3,5-trisubstituted pyrazoles. The synthetic method only presents limitations when the  $\beta$ -substituent of the enone and the hydrazine substituent are bulky or possess an electron-withdrawing character. Comparison of the  $^{13}\text{C}$ -NMR spectra of the pyrazoles allowed for to estimate a  $^{13}\text{C}$ -chemical shift prediction rule for 1,3,5-trisubstituted pyrazoles, with deviations  $\leq \pm 1$  ppm.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

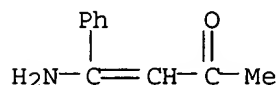
L3 ANSWER 13 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6 231301-47-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(pyrazoles via reactions of  $\beta$ -aminoenones with acetylhydrazine, semicarbazide and methoxycarbonylhydrazine)

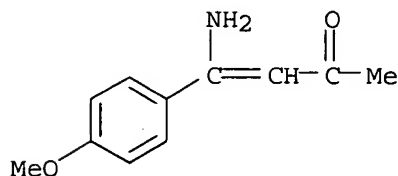
RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



RN 231301-47-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1999:710019 CAPLUS

DOCUMENT NUMBER: 132:93249

TITLE: Reactions of  $\beta$ -aminoenones with acetylhydrazine, semicarbazide and methoxycarbonylhydrazine. Synthesis of 1-acetyl-, 1-carboxamide- or methyl 1-carboxylated pyrazole derivatives

AUTHOR(S): Alberola, Angel; Calvo, Luis; Ortega, Alfonso  
Gonzalez, Sadaba, M. Luisa; Sanudo, M. Carmen; Granda, Santiago Garcia; Rodriguez, Elena Garcia

CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Ciencias, Universidad de Valladolid, Valladolid, 47005, Spain

SOURCE: Heterocycles (1999), 51(11), 2675-2686

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

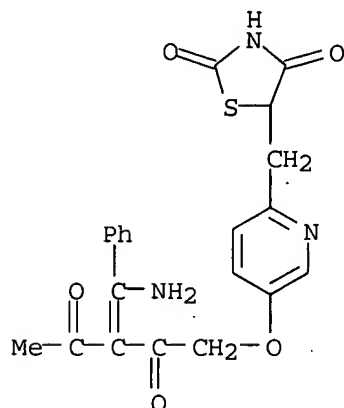
OTHER SOURCE(S): CASREACT 132:93249

ABSTRACT:

Acetylhydrazine, semicarbazide and methoxycarbonylhydrazine react with  $\beta$ -aminoenones to give regioselectively the corresponding N-acetyl- or N-carboxypyrazole derivs. The reactions are highly regioselective and occur via 5-hydroxypyrazolines, which in several cases can be isolated and characterized.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

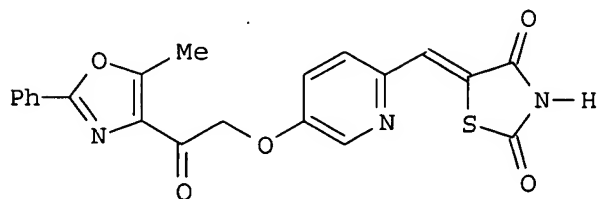
L3 ANSWER 14 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 243147-05-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of pyridylmethyl(idene)thiazolidenediones as hypoglycemic agents)  
 RN 243147-05-9 CAPLUS  
 CN 2,4-Thiazolidinedione, 5-[[5-[[3-(aminophenylmethylene)-2,4-dioxopentyl]oxy]-2-pyridinyl]methyl]- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1999:606967 CAPLUS  
 DOCUMENT NUMBER: 131:214281  
 TITLE: Preparation of pyridylmethyl(idene)thiazolidenediones as hypoglycemic agents  
 INVENTOR(S): Ohara, Yoshio; Suzuki, Mikio; Miyachi, Nobuhide; Kato, Katsuhiko; Ohdoi, Keisuke; Kobayashi, Tetsuya; Shikada, Ken-ichi; Naito, Takeshi; Yotsumoto, Takashi  
 PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan  
 SOURCE: U.S., 74 pp., Cont.-in-part of U. S. Ser. No. 704,774, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5955481	A	19990921	US 1998-18843	19980204
ZA 9502479	A	19951215	ZA 1995-2479	19950327
PRIORITY APPLN. INFO.:			JP 1994-57192	A 19940328
			JP 1994-295177	A 19941129
			US 1995-704774	B2 19950327

OTHER SOURCE(S): MARPAT 131:214281  
 GRAPHIC IMAGE:



ABSTRACT:

Title compds. [I; R = R1OZ1Z2; R1 = alk(en)yl, acyl, (hetero)aryl(alkyl), etc.; R4 = H or alkyl; X = O, S, NH; Z = O or S; Z1 = (1-oxido)(un)substituted pyridine-3,6-diyl; Z2 = CR6R7 or SO2; R6,R7 = H or (cyclo)alkyl; R4R7 = bond] were prepared. Thus, 5-hydroxy-2-pyridinemethanol was etherified by 4-bromoacetyl-5-methyl-2-phenyloxazole and the oxidized product condensed with thiazolidine-2,4-dione to give title compound II. Data for biol. activity of I were given.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

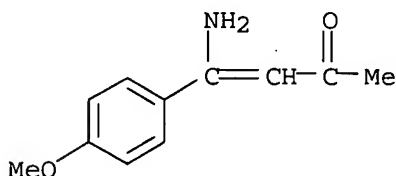
IT 231301-47-6P 231301-48-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of isoxazoles by ultrasound cyclocondensation of acyl enamines)

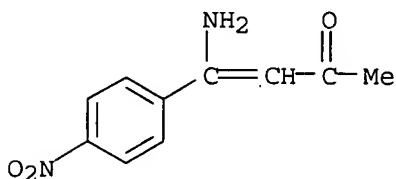
RN 231301-47-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 231301-48-7 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1999:329002 CAPLUS

DOCUMENT NUMBER: 131:102226

TITLE: Reactivity of p-phenyl substituted  $\beta$ -enamino compounds using K-10/ultrasound. II. Synthesis of isoxazoles and 5-isoxazolones

AUTHOR(S): Valduga, Claudete J.; Santis, Denise B.; Braibante, Hugo S.; Braibante, Mara E. F.

CORPORATE SOURCE: Departamento de Quimica, Universidade Federal de Santa Maria, Santa Maria, 97105-900, Brazil

SOURCE: Journal of Heterocyclic Chemistry (1999), 36(2), 505-508

CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal

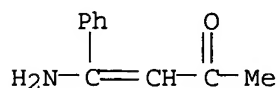
LANGUAGE: English

ABSTRACT:

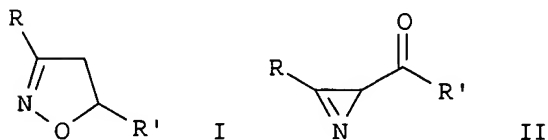
The condensation of 4-Ph substituted  $\beta$ -enamino ketones and  $\beta$ -enamino esters with HONH<sub>2</sub>.HCl using K-10 as the solid support under sonication was studied to evaluate the formation of isoxazole and 5-isoxazolone rings from  $\beta$ -enamino compds. with a substituted aromatic ring. The use of K-10/ultrasound in this reaction furnished novel results in some cases.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 14088-41-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(iron dichloride induced isomerization and reductive cleavage of  
isoxazoles to carboxyazirines and enamino ketones)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



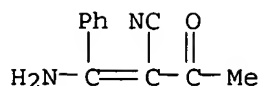
ACCESSION NUMBER: 1997:535658 CAPLUS  
DOCUMENT NUMBER: 127:205417  
TITLE: Iron dichloride induced isomerization or reductive  
cleavage of isoxazoles: a facile synthesis of  
2-carboxyazirines  
AUTHOR(S): Auricchio, Sergio; Bini, Antonella; Pastormerlo, Eros;  
Truscetto, Ada M.  
CORPORATE SOURCE: Dipartimento di Chimica, Politecnico di Milano, Milan,  
20131, Italy  
SOURCE: Tetrahedron (1997), 53(31), 10911-10920  
CODEN: TETRAB; ISSN: 0040-4020  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GRAPHIC IMAGE:



ABSTRACT:  
5-Alkoxy-isoxazoles and N,N-disubstituted-5-isoxazolamines I (R = Ph,  
4-O2NC6H4, 4-MeOC6H4, R' = OMe, NMePh, NMe2) were found to isomerize to azirine  
derivs. II by the use of iron dichloride as catalyst. On the contrary 5-alkyl-  
and 5-aryl-isoxazoles I (R = R' = Me, Ph; R = Me, R' = Ph; R = Ph, R' = Me) in  
the presence of the same salt, undergo reductive cleavage to enamino ketones  
RC(NH2):CHCOR'. A common reaction intermediate is proposed.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 33831-49-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(for preparation of imidazo[4,5-c]pyridine derivs. with aromatic  
substituent as  
antagonists)  
RN 33831-49-1 CAPLUS  
CN Butanenitrile, 2-(aminophenylmethylene)-3-oxo- (9CI) (CA INDEX NAME)

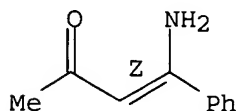


ACCESSION NUMBER: 1995:741580 CAPLUS  
 DOCUMENT NUMBER: 123:339884  
 TITLE: Synthesis and evaluation of novel nonpeptide  
 angiotensin II receptor antagonists:  
 imidazo[4,5-c]pyridine derivatives with an aromatic  
 substituent  
 AUTHOR(S): Kiyama, Ryuichi; Fuji, Masahiro; Hara, Mariko;  
 Fujimoto, Masafumi; Kawabata, Tomoji; Nakamura,  
 Matsuhisa; Fujishita, Toshio  
 CORPORATE SOURCE: Shionogi Res. Lab., Shionogi & Co., Ltd., Osaka, 553,  
 Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(3),  
 450-60  
 CODEN: CPBTAL; ISSN: 0009-2363  
 PUBLISHER: Pharmaceutical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 123:339884  
 ABSTRACT:

Starting from recently reported nonpeptidic angiotensin II (AII) receptor antagonists, the authors have designed and prepared a new series of 6-arylimidazo[4,5-c]pyridine derivs. Variation of Ph groups at the 4-, 6- or 7-position of imidazo[4,5-c]pyridine showed that substitution at the 6-position resulted in receptor-binding activity almost as potent as that of DuP 753. This led to synthesis and evaluation of an extensive series of 6-aryl-imidazo[4,5-c]pyridine derivs. Some of them were 4-fold more potent in vitro than DuP 753, but only showed weak antihypertensive activity in vivo when given orally to rats.

L3 ANSWER 18 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 95514-24-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (regioselective preparation of  $\beta$ -enamino ketones via stereocontrolled  
 conversion of 3-unsubstituted isoxazoles into Z- $\beta$ -  
 siloxyacrylonitriles)  
 RN 95514-24-2 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl-, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1995:427088 CAPLUS  
 DOCUMENT NUMBER: 123:55070  
 TITLE: Stereocontrolled conversion of 3-unsubstituted  
 isoxazole compounds into Z- $\beta$ -  
 siloxyacrylonitriles. A new method for the  
 regioselective synthesis of  $\beta$ -enamino ketones  
 AUTHOR(S): Gonzalez, B.; Gonzalez, A. M.; Pulido, F. J.  
 CORPORATE SOURCE: Dep. Quim. Organ., Univ. Valladolid, Valladolid,  
 47011, Spain  
 SOURCE: Synthetic Communications (1995), 25(7), 1005-14  
 CODEN: SYNCAV; ISSN: 0039-7911  
 PUBLISHER: Dekker

DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 123:55070  
ABSTRACT:

The stereoselective synthesis of Z- $\beta$ -siloxyacrylonitriles via base-induced ring cleavage of isoxazole precursors is described. Z- $\beta$ -siloxyacrylonitriles react with organolithium compds. to give high yields of  $\beta$ -enamino ketones.

L3 ANSWER 19 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

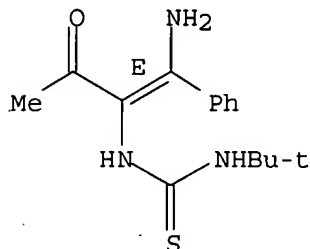
IT 134650-94-5P 134650-95-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 134650-94-5 CAPLUS

CN Thiourea, N-[1-(aminophenylmethylene)-2-oxopropyl]-N'-(1,1-dimethylethyl)-  
, (E)- (9CI) (CA INDEX NAME)

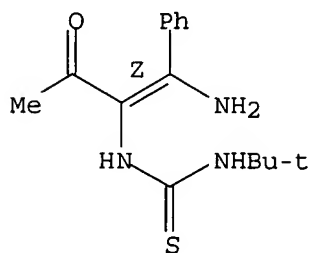
Double bond geometry as shown.



RN 134650-95-6 CAPLUS

CN Thiourea, N-[1-(aminophenylmethylene)-2-oxopropyl]-N'-(1,1-dimethylethyl)-  
, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1991:429186 CAPLUS

DOCUMENT NUMBER: 115:29186

TITLE: Transformations in the isoxazole series: synthesis of substituted 2-aminothiazoles

AUTHOR(S): Pascual, Alfons

CORPORATE SOURCE: Agro Div., Ciba-Geigy A.-G., Basel, CH-4002, Switz.

SOURCE: Helvetica Chimica Acta (1991), 74(3), 531-42

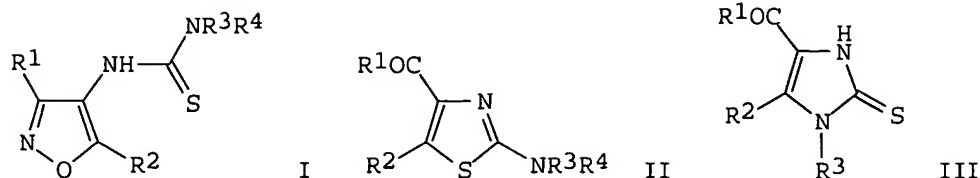
CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:29186

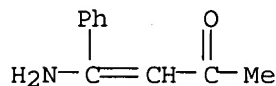
GRAPHIC IMAGE:



**ABSTRACT:**

Substituted N-(isoxazolyl)thioureas, e.g., I (R1-R4 = Me; R1-R3 = Me, R4 = Ph; R1 = R2 = Me, R3 = CMe3, PhCH2, Pr, Ph, 4-MeOC6H4, 4-MeC6H4, R4 = H; R1-R3 = CHMe2, R4 = H) undergo a transformation in the presence of hexacarbonylmolybdenum and acid to yield functionalized thiazoles, e.g., II in a one-pot reaction. In a few cases, 1,4,5-trisubstituted dihydroimidazolethiones III are also isolated as side products. Mechanistic considerations are outlined and scope and limitations of this new methodol. discussed.

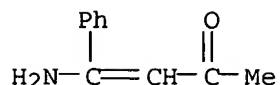
L3 ANSWER 20 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (transamination of, with Et glycinate)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1991:42449 CAPLUS  
 DOCUMENT NUMBER: 114:42449  
 TITLE: The reaction of  $\beta$ -aminoenones with  $\alpha$ -amino derivatives. Synthesis of 2-functionalized pyrroles  
 AUTHOR(S): Alberola, Angel; Andres, Jose M.; Gonzalez, Alfonso; Pedrosa, Rafael; Vicente, Martina  
 CORPORATE SOURCE: Fac. Cienc., Univ. Valladolid, Valladolid, 47011, Spain  
 SOURCE: Heterocycles (1990), 31(6), 1049-58  
 CODEN: HCTCYAM; ISSN: 0385-5414  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 114:42449  
 ABSTRACT:  $\beta$ -Aminoenones react with Et glycinate,  $\alpha$ -aminoacetonitrile and  $\alpha$ -aminoacetamide hydrochlorides leading to 2-functionalized pyrroles. Although the transamination is a high-yield process, the transformation of the intermediate, in both basic or thermally induced conditions, affords the corresponding pyrroles in poor to moderate yields. Thus, transamination of AcCH:CMenH2 with EtO2CCH2N+H3 in MeOH gave 89% AcCH:CMenHCH2CO2Et which on cyclization in EtONa/EtOH gave 33% Et 3,5-dimethyl-2-pyrrolecarboxylate.

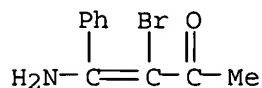
L3 ANSWER 21 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6P 129200-01-7P  
 RL: FORM (Formation, nonpreparative); PREP (Preparation)  
 (formation of, during basic hydrolysis of bromoethylmethyltriazine)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)





RN 129200-01-7 CAPLUS

CN 3-Buten-2-one, 4-amino-3-bromo-4-phenyl- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1990:515259 CAPLUS

DOCUMENT NUMBER: 113:115259

TITLE: Reaction of 5-halo-1,2,3-triazines with superoxide;  
synthesis of 5-hydroxy-1,2,3-triazines

AUTHOR(S): Itoh, Takashi; Nagata, Kazuhiro; Okada, Mamiko;  
Ohsawa, Akio

CORPORATE SOURCE: Sch. Pharm. Sci., Showa Univ., Tokyo, 142, Japan

SOURCE: Tetrahedron Letters (1990), 31(17), 2429-30

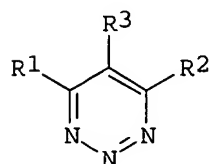
CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal

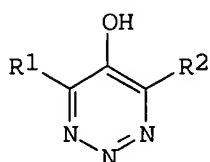
LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:115259

GRAPHIC IMAGE:



I



II

#### ABSTRACT:

5-Halo-1,2,3-triazines I (R<sup>1</sup> = Me, R<sup>2</sup> = Me, Et, Ph, R<sup>3</sup> = Br; R<sup>1</sup> = R<sup>2</sup> = Et, R<sup>3</sup> = Br; R<sup>1</sup> = R<sup>2</sup> = Ph, R<sup>3</sup> = Cl) were allowed to react with electrolytically produced superoxide to give 5-hydroxy-1,2,3-triazines II. Reaction with hydroxide anion gave ring opening products, therefore this substitution was specific for superoxide.

L3 ANSWER 22 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

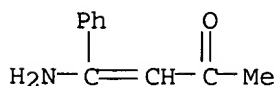
IT 14088-41-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with phenacylamine, acylpyrroles from)

RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)

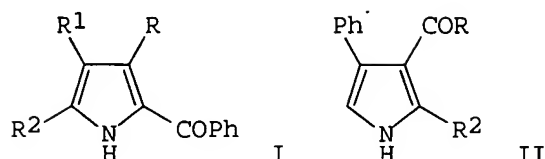


ACCESSION NUMBER: 1990:198025 CAPLUS

DOCUMENT NUMBER: 112:198025

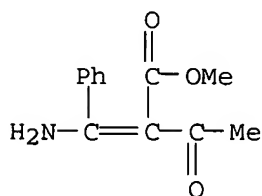
TITLE: The reactivity of β-aminoenones towards  
phenacylamine hydrochloride

AUTHOR(S): Alberola, Angel; Andres, Jose M.; Gonzalez, Alfonso;  
 Pedrosa, Rafael; Vicente, Martina  
 CORPORATE SOURCE: Fac. Cienc., Univ. Valladolid, Valladolid, 47011,  
 Spain  
 SOURCE: Heterocycles (1989), 29(10), 1973-82  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 112:198025  
 GRAPHIC IMAGE:



ABSTRACT:  
 RCOCR<sup>1</sup>:CR<sup>2</sup>NH<sub>2</sub> (R = Me, Et, CMe<sub>3</sub>, Ph, PhCH<sub>2</sub>CH<sub>2</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>; R<sup>1</sup> = H, Me, PhCH<sub>2</sub>, CH<sub>2</sub>CN, CO<sub>2</sub>Et, CH<sub>2</sub>CO<sub>2</sub>Et; R<sup>2</sup> = Me, Et, CMe<sub>3</sub>, Ph, PhCH<sub>2</sub>CH<sub>2</sub>) react with PhCOCH<sub>2</sub>NH<sub>2</sub>.HCl to give a mixture of 2- and 3-acylpyrroles, I and II resp. The reaction is a two-step process: formation of an isolable β-phenacylaminoenone intermediate and cyclization to 2- and 3-acylpyrroles, depending on the starting β-aminoenone substituents.

L3 ANSWER 23 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 95192-69-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 95192-69-1 CAPLUS  
 CN Butanoic acid, 2-(aminophenylmethylene)-3-oxo-, methyl ester (9CI) (CA  
 INDEX NAME)



ACCESSION NUMBER: 1989:74802 CAPLUS  
 DOCUMENT NUMBER: 110:74802  
 TITLE: Tin(IV) chloride-promoted vs. metal  
 β-carbonyl-enolate-catalyzed reactions of  
 β-dicarbonyls with nitriles  
 AUTHOR(S): Veronese, Augusto C.; Gandolfi, Vittorio; Basato,  
 Marino; Corain, Benedetto  
 CORPORATE SOURCE: Dip. Sci. Farm., Ferrara, 44100, Italy  
 SOURCE: Journal of Chemical Research, Synopses (1988), (8),  
 246-7  
 CODEN: JRPSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 110:74802  
 ABSTRACT:  
 Acetoacetate esters underwent an addition reaction with nitriles in C<sub>6</sub>H<sub>6</sub> or PhMe

containing  $\text{SnCl}_4$  to give  $\text{MeCOC}[:\text{C}(\text{NH}_2)\text{R}_2]\text{CO}_2\text{R}_1$  ( $\text{R}_1 = \text{Me, Et; R}_2 = \text{Me, Et, PhCH}_2, \text{Ph, pyridyl, NH}_2, \text{CO}_2\text{Et, PhCO}$ ). Malonate esters  $\text{CH}_2(\text{CO}_2\text{R}_3)_2$  ( $\text{R}_3 = \text{Me, Et}$ ) and  $\text{R}_4\text{CN}$  ( $\text{R}_4 = \text{Et, NH}_2, \text{CCl}_3, \text{CO}_2\text{Et, PhCO}$ ) gave  $(\text{R}_3\text{O}_2\text{C})_2\text{C}:\text{C}(\text{NH}_2)\text{R}_4$ .

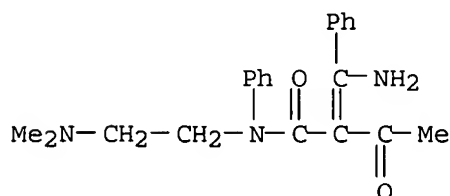
L3 ANSWER 24 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 88098-92-4P 88098-94-6P 88098-95-7P  
88098-96-8P 88098-97-9P 88098-98-0P  
88098-99-1P 88099-00-7P 113702-88-8P  
113702-89-9P 113702-91-3P 113702-94-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as hypoglycemic agent)

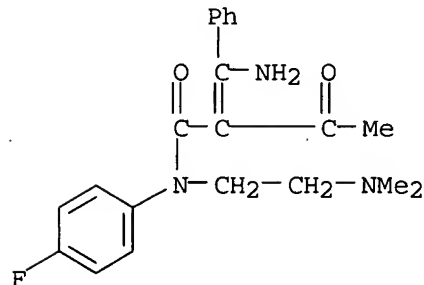
RN 88098-92-4 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



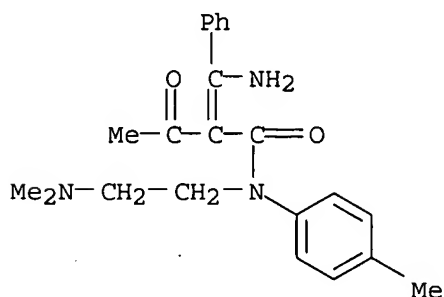
RN 88098-94-6 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-fluorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



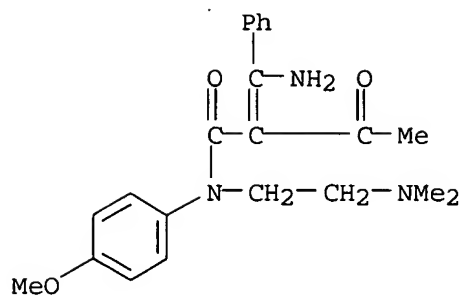
RN 88098-95-7 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-methylphenyl)-3-oxo- (9CI) (CA INDEX NAME)



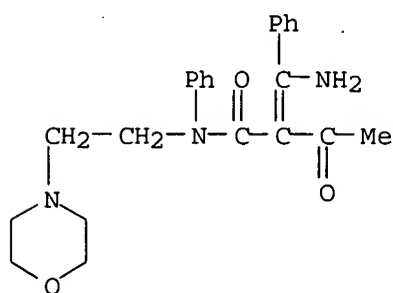
RN 88098-96-8 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



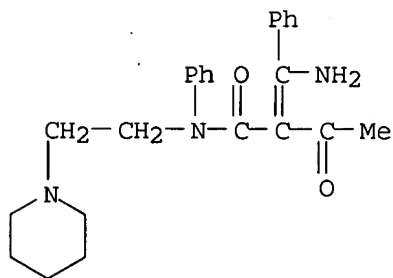
RN 88098-97-9 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(4-morpholinyl)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



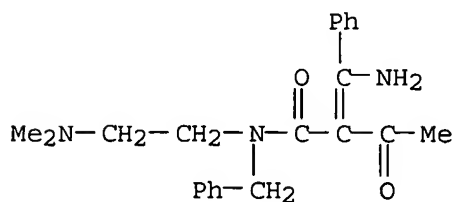
RN 88098-98-0 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-3-oxo-N-phenyl-N-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)



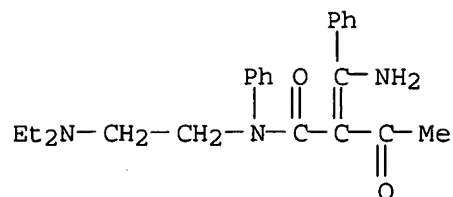
RN 88098-99-1 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-phenylmethyl- (9CI) (CA INDEX NAME)



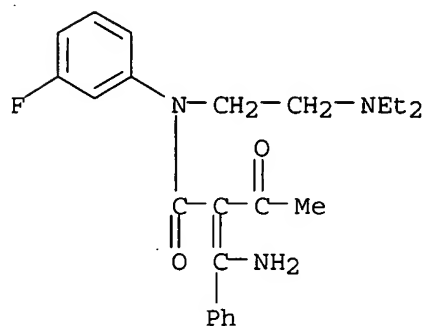
RN 88099-00-7 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(diethylamino)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



RN 113702-88-8 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(diethylamino)ethyl]-N-(3-fluorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



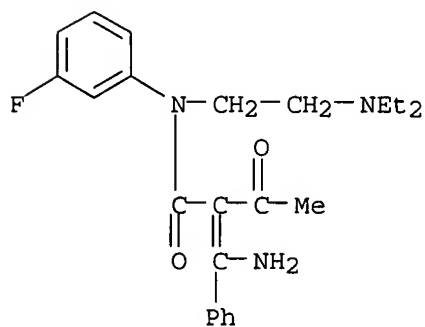
RN 113702-89-9 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(diethylamino)ethyl]-N-(3-fluorophenyl)-3-oxo-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 113702-88-8

CMF C23 H28 F N3 O2

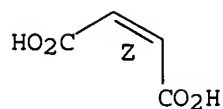


CM 2

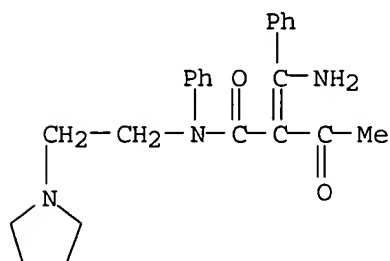
CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

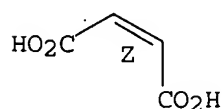


RN 113702-91-3 CAPLUS  
 CN Butanamide, 2-(aminophenylmethylene)-3-oxo-N-phenyl-N-[2-(1-pyrrolidinyl)ethyl]-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 113702-90-2  
 CMF C23 H27 N3 O2

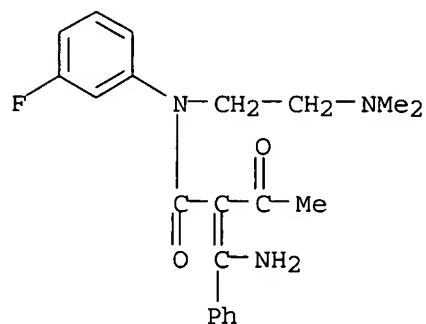


CM 2  
 CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



RN 113702-94-6 CAPLUS  
 CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(3-fluorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1988:150066 CAPLUS  
 DOCUMENT NUMBER: 108:150066  
 TITLE: Preparation of N,N-disubstituted alkenamides and phenylalkenamides as antidiabetic agents

INVENTOR(S): Nadelson, Jeffrey  
 PATENT ASSIGNEE(S): Sandoz Pharmaceuticals Corp., USA  
 SOURCE: U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 505,804,  
 abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent  
 LANGUAGE: English

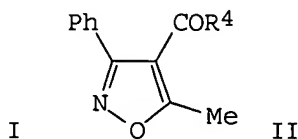
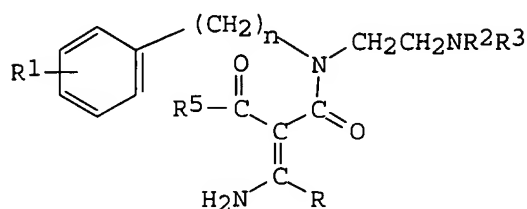
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4681898	A	19870721	US 1984-608126	19840508
PRIORITY APPLN. INFO.:			US 1981-330601	A2 19811214
			US 1983-505804	A2 19830620

OTHER SOURCE(S): CASREACT 108:150066

GRAPHIC IMAGE:



# ABSTRACT:

The title amides [I; R = alkyl, Ph, R1C6H4; R1 = H, halo, alkyl, alkoxy; R2, R3 = alkyl; R2R3 = (CH2)4-6; R2R3N = morpholino; R5 = H, C1-6 alkyl; n = 0, 1] and their pharmaceutically acceptable salts, useful as antidiabetics and hypoglycemics, are prepared. A solution of phenylisoxazole derivative II (R4 = Cl) in

THF was added to a mixture of Me2NCH2CH2NHPh and Et3N in THF under cooling and stirred at room temperature to give amide II (R4 = Me2NCH2CH2NPh), which was hydrogenated over 10% Pd-C at 50-60° and 50 psi H to give I (R = Ph, R1 = H, R2 = R3 = R5 = Me, n = 0), which (350 mg) was formulated with 150 mg lactose to give a capsule showing ED25 of 74 mg/kg p.o. in treating diabetes in mammals, vs. 110 mg/kg with tolbutamide.

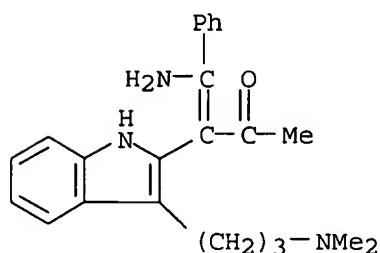
L3 ANSWER 25 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 88933-66-8 88933-68-0 100935-38-4  
 100935-45-3 100935-46-4 100935-47-5  
 100935-48-6 100935-49-7

RL: BIOL (Biological study)  
 (as male contraceptive)

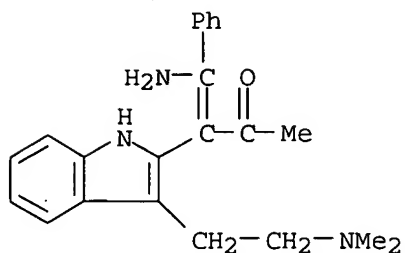
RN 88933-66-8 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[3-[3-(dimethylamino)propyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



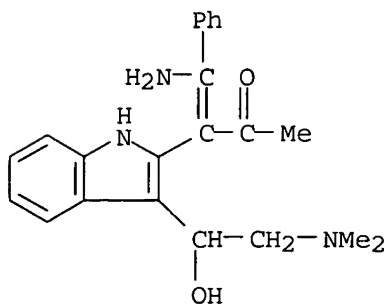
RN 88933-68-0 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)ethyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



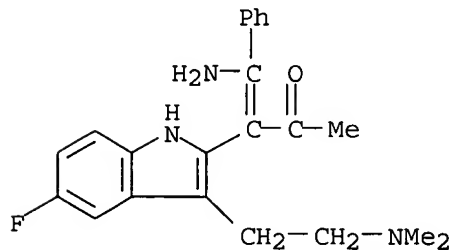
RN 100935-38-4 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)-1-hydroxyethyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



RN 100935-45-3 CAPLUS

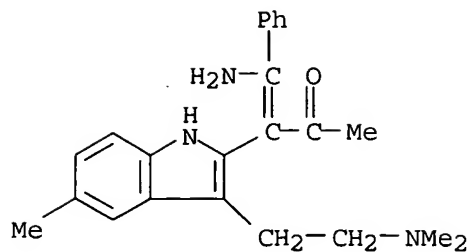
CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)ethyl]-5-fluoro-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



RN 100935-46-4 CAPLUS

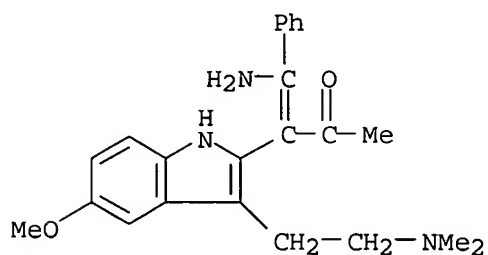
CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)ethyl]-5-methyl-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)





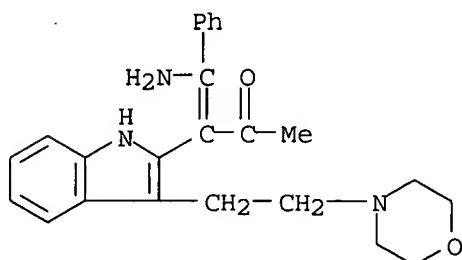
RN 100935-47-5 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)ethyl]-5-methoxy-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



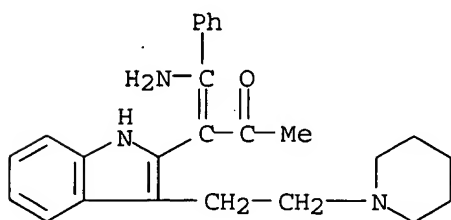
RN 100935-48-6 CAPLUS

CN 3-Buten-2-one, 4-amino-3-[3-[2-(4-morpholinyl)ethyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



RN 100935-49-7 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl-3-[3-[2-(1-piperidinyl)ethyl]-1H-indol-2-yl]- (9CI) (CA INDEX NAME)



ACCESSION NUMBER:

1986:116097 CAPLUS

DOCUMENT NUMBER:

104:116097

TITLE:

Indolamine derivatives as anti-fertility agents

INVENTOR(S):

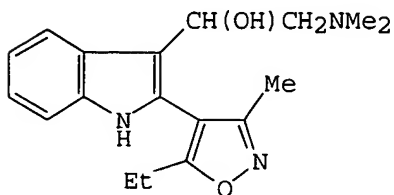
Manning, Robert E.; Nadelson, Jeffrey

PATENT ASSIGNEE(S):

Sandoz, Inc., USA

SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4544663	A	19851001	US 1984-607667	19840507
PRIORITY APPLN. INFO.:			US 1984-607667	19840507
GRAPHIC IMAGE:				



I

# ABSTRACT:

Ninety indolamines were tested for aspermatogenic activity in adult beagle dogs. A representative compound I caused a significant decrease in spermatogenesis after 14 days of oral administration at 12 mg/kg/day in the dogs. The effect lasted for .apprx.85 days. Histopathol. examns. of testes were normal. Tablets and capsules composition are also described.

L3 ANSWER 26 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

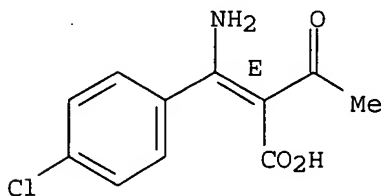
IT 95514-22-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and decarboxylation of)

RN 95514-22-0 CAPLUS

CN Butanoic acid, 2-[amino(4-chlorophenyl)methylene]-3-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



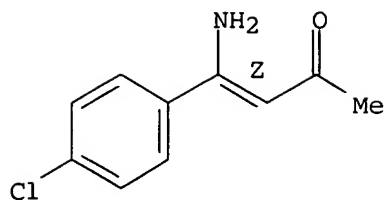
IT 95514-23-1P 95514-24-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and ring closure of)

RN 95514-23-1 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(4-chlorophenyl)-, (Z)- (9CI) (CA INDEX NAME)

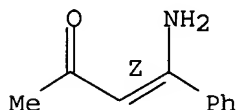
Double bond geometry as shown.



RN 95514-24-2 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl-, (3Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1985:166113 CAPLUS

DOCUMENT NUMBER: 102:166113

TITLE: Ring transformation equilibrium (bond switch) in 5-(2-aminovinyl)isothiazole system via hypervalent sulfurane. Synthesis, structure determination, and kinetic study

AUTHOR(S): Akiba, Kinya; Kashiwagi, Kohichi; Ohyama, Yoshihiko; Yamamoto, Yohsuke; Ohkata, Katsuo

CORPORATE SOURCE: Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan

SOURCE: Journal of the American Chemical Society (1985), 107(9), 2721-30

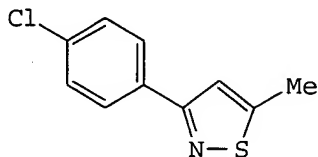
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

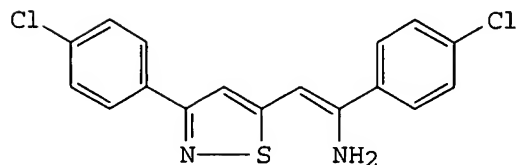
LANGUAGE: English

OTHER SOURCE(S): CASREACT 102:166113

GRAPHIC IMAGE:



I

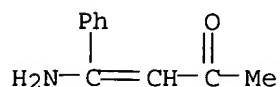


II

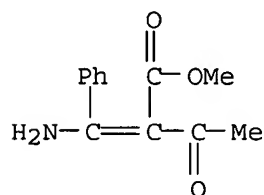
# ABSTRACT:

Reaction of 3-aryl-5-methylisothiazoles (e.g. I) with aromatic nitriles afforded (aminovinyl)isothiazoles (e.g. II) in the presence of LDA. The ring transformation of (aminovinyl)isothiazoles was studied. Rates of reversible ring transformation for the (aminovinyl)isothiazoles were determined; solvent and substituent effects were discussed.

L3 ANSWER 27 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6P 95192-69-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



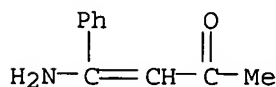
RN 95192-69-1 CAPLUS  
 CN Butanoic acid, 2-(aminophenylmethylene)-3-oxo-, methyl ester (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1985:149156 CAPLUS  
 DOCUMENT NUMBER: 102:149156  
 TITLE: Reduction of cyclic compounds having nitrogen-oxygen linkage by dihydrolipoamide-iron(II)  
 AUTHOR(S): Kijima, Masashi; Nambu, Yoko; Endo, Takeshi  
 CORPORATE SOURCE: Res. Lab. Resour. Util., Tokyo Inst. Technol., Yokohama, 227, Japan  
 SOURCE: Journal of Organic Chemistry (1985), 50(7), 1140-2  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 102:149156  
 ABSTRACT:

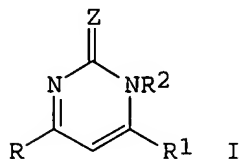
Dihydrolipoamide (DHLAm) was an effective reagent in the presence of a catalytic amt of Fe<sup>2+</sup> for the reduction of cyclic N-O compds. such as isoxazolidines and isoxazoles. Isoxazolidines and isoxazoles were reduced to 3-aminopropanols and β-aminoenones in good yields, resp. The reduction might proceed through the complex formation between DHLAm-Fe(II) and N-O compds.

L3 ANSWER 28 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cycloaddn.-cyclocondensation of, with aryl isocyanates and isothiocyanates)  
 RN 14088-41-6 CAPLUS  
 CN , 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1984:423428 CAPLUS  
 Correction of: 1983:198136

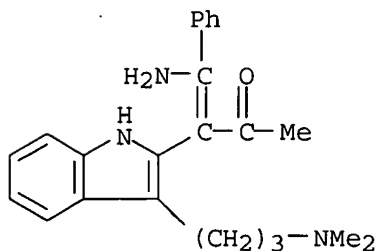
DOCUMENT NUMBER: 101:23428  
 Correction of: 98:198136  
 TITLE: The selective synthesis of unsymmetrical 1-substituted  
 2(1H)-pyrimidinones and -thiones  
 AUTHOR(S): Kashima, Choji; Katoh, Akira; Yokota, Yuko; Omote,  
 Yoshimori  
 CORPORATE SOURCE: Dep. Chem., Univ. Tsukuba, Sakura, 305, Japan  
 SOURCE: Synthesis (1983), (2), 151-3  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GRAPHIC IMAGE:



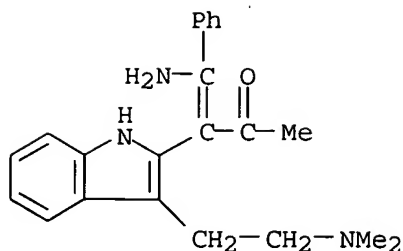
ABSTRACT:

The reaction of  $RC(NH_2):CHCOR_1$  ( $R = Me, Et, Ph$ ;  $R_1 = C1-3$  alkyl,  $Ph$ ) with  $R_2N:C:Z$  ( $R_2 = Ph, 4-ClC_6H_4, Et$ ;  $Z = O, S$ ) and  $NaH$  yielded pyrimidines I. Thus,  $MeC(NH_2):CHCOEt$  was treated with  $PhNCO$  and  $NaH$  in  $DMF$  at room temperature to give I ( $R = Me, R_1 = Et, R_2 = Ph, Z = O$ ). Ketone  $MeC(NH_2):CHCOMe$  and  $PhNCS$  gave  $MeC(NH_2):C(CSNHPh)COMe$  and only a small amount of I ( $R = R_1 = Me, R_2 = Ph, Z = S$ ).

L3 ANSWER 29 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 88933-66-8P 88933-68-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as antidiabetic)  
 RN 88933-66-8 CAPLUS  
 CN 3-Buten-2-one, 4-amino-3-[3-[3-(dimethylamino)propyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)

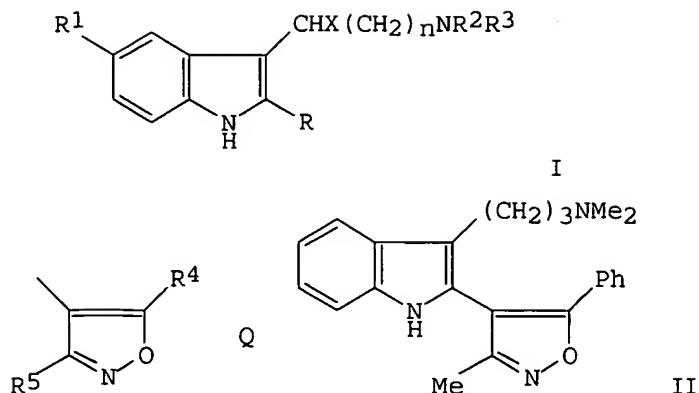


RN 88933-68-0 CAPLUS  
 CN 3-Buten-2-one, 4-amino-3-[3-[2-(dimethylamino)ethyl]-1H-indol-2-yl]-4-phenyl- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1984:156590 CAPLUS  
 DOCUMENT NUMBER: 100:156590  
 TITLE: 2-Substituted-3-indolamines and their use  
 INVENTOR(S): Brand, Leonard Jay; Nadelson, Jeffrey  
 PATENT ASSIGNEE(S): Sandoz-Patent-G.m.b.H., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 38 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3312107	A1	19831020	DE 1983-3312107	19830402
CH 656124	A	19860613	CH 1983-1761	19830330
US 4536499	A	19850820	US 1983-481373	19830401
FI 8301165	A	19831014	FI 1983-1165	19830406
BE 896421	A1	19831011	BE 1983-10756	19830411
DK 8301592	A	19831014	DK 1983-1592	19830411
FR 2524881	A1	19831014	FR 1983-5992	19830411
FR 2524881	B1	19850920		
GB 2119372	A1	19831116	GB 1983-9729	19830411
GB 2119372	B2	19850918		
SE 8302026	A	19831014	SE 1983-2026	19830412
AU 8313440	A1	19831020	AU 1983-13440	19830412
JP 58188882	A2	19831104	JP 1983-63100	19830412
HU 32560	O	19840828	HU 1983-1273	19830412
ES 521398	A1	19841101	ES 1983-521398	19830412
NL 8301289	A	19831101	NL 1983-1289	19830413
ZA 8302600	A	19841128	ZA 1983-2600	19830413
US 4582848	A	19860415	US 1983-504941	19830616
PRIORITY APPLN. INFO.:			US 1982-367938	A 19820413
			US 1982-387224	A 19820610
OTHER SOURCE(S):		CASREACT 100:156590		
GRAPHIC IMAGE:				



**ABSTRACT:**

Indolamines I [R<sub>1</sub> = H, F, Cl, C1-4 alkyl or alkoxy; R<sub>2</sub>, R<sub>3</sub> = C1-4 alkyl; NR<sub>2</sub>R<sub>3</sub> = pyrrolidino, piperidiny, hexamethylenimino, morpholino; R = Q, X = H, n = 2-4; R = C<sub>6</sub>H<sub>4</sub>Ph, naphthyl, C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Ph, indanyl, fluorenyl, C(COR<sub>4</sub>):C(NH<sub>2</sub>)R<sub>5</sub>, X = H or OH n = 1-4; R<sub>4</sub> = H, C1-4 alkyl; R<sub>5</sub> = H, C1-4 alkyl, Ph (un)substituted with halogen, C1-4 alkyl or alkoxy] and their acid addition salts, useful as antidiabetics (no data), were prepared Isoxazoly lindolepropanamine II was prepared in 6 steps from 2-(5-methyl-3-phenyl-4-isoxazoly)indole, HNMe<sub>2</sub>, and 37% aqueous HCHO.

L3 ANSWER 30 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 88098-92-4P 88098-94-6P 88098-95-7P

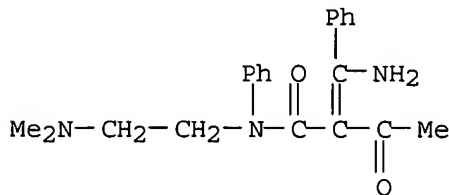
88098-96-8P 88098-97-9P 88098-98-0P

88098-99-1P 88099-00-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

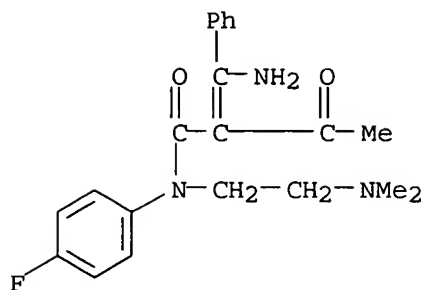
RN 88098-92-4 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



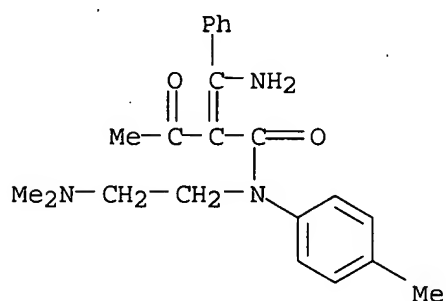
RN 88098-94-6 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-fluorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



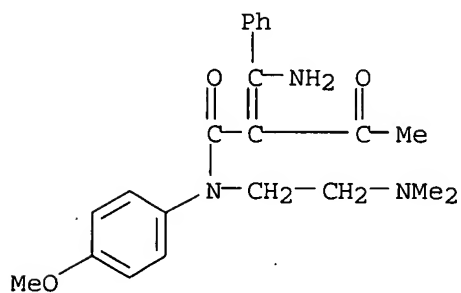
RN 88098-95-7 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-methylphenyl)-3-oxo- (9CI) (CA INDEX NAME)



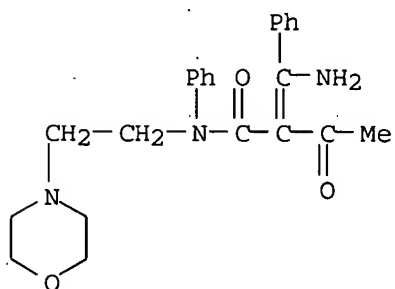
RN 88098-96-8 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-N-(4-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



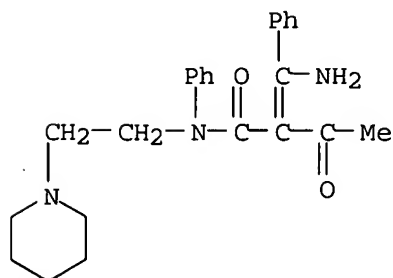
RN 88098-97-9 CAPLUS

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(4-morpholinyl)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)

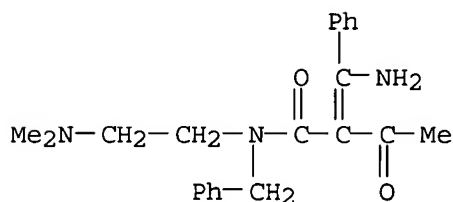




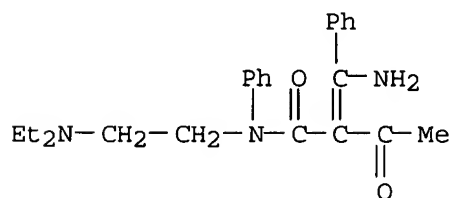
RN 88098-98-0 CAPLUS  
 CN Butanamide, 2-(aminophenylmethylene)-3-oxo-N-phenyl-N-[2-(1-piperidiny)ethyl]- (9CI) (CA INDEX NAME)



RN 88098-99-1 CAPLUS  
 CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 88099-00-7 CAPLUS  
 CN Butanamide, 2-(aminophenylmethylene)-N-[2-(diethylamino)ethyl]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



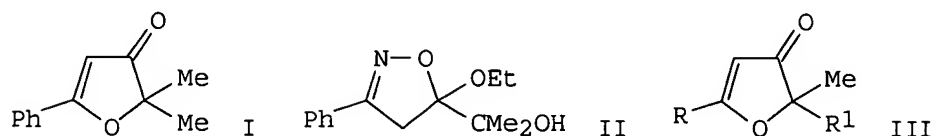
ACCESSION NUMBER: 1984:6099 CAPLUS  
 DOCUMENT NUMBER: 100:6099  
 TITLE: N,N-Disubstituted alkenamides and phenylalkenamides and their use as pharmaceuticals  
 INVENTOR(S): Nadelson, Jeffrey  
 PATENT ASSIGNEE(S): Sandoz A.-G., Switz.; Sandoz-Patent-G.m.b.H.; Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H.  
 SOURCE: Eur. Pat. Appl., 15 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 84292	A1	19830727	EP 1982-810533	19821209
EP 84292	B1	19850213		

R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE



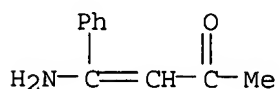
synthesis of 3(2H)-furanones  
 AUTHOR(S): Curran, Dennis P.; Singleton, David H.  
 CORPORATE SOURCE: Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260, USA  
 SOURCE: Tetrahedron Letters (1983), 24(20), 2079-82  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 99:105069  
 GRAPHIC IMAGE:



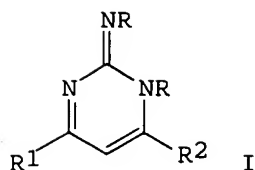
ABSTRACT:

The 3(2H)-furanone ring system, a structural unit of natural products such as bullatenone (I), geiparvarin, jatrophone, and lychnophorolide, was prepared by cycloaddn. of a nitrile oxide and enol ether and hydrogenolysis-hydrolysis of the resulting isoxazoline. Thus, cyclization of  $\text{HOCMe}_2\text{C(OEt):CH}_2$  and  $\text{PhC.tplbond.N+O-}$  (generated in situ from  $\text{PhCH}_2\text{NO}_2$  and  $\text{PhNCO-Et}_3\text{N}$ ), gave the isoxazoline II. Hydrogenolysis of II gave  $\text{HOCMe}_2\text{COCH:C(NH}_2\text{)Ph}$  which was not isolated and hydrolyzed to give I. Furanones III ( $\text{R} = \text{Me, Et}$ ;  $\text{R}_1 = \text{Me, HOCH}_2\text{CH}_2, \text{HOCH}_2\text{CH}_2\text{CH}_2, \text{H}$ ) were prepared analogously.

L3 ANSWER 32 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization of, with carbodiimides, pyrimidines from)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1983:470667 CAPLUS  
 DOCUMENT NUMBER: 99:70667  
 TITLE: A convenient synthesis of 4,6-disubstituted  
 1-aryl-2-arylimino-1,2-dihydropyrimidines  
 AUTHOR(S): Katoh, Akira; Sagane, Masako; Omote, Yoshimori;  
 Kashima, Choji  
 CORPORATE SOURCE: Dep. Chem., Univ. Tsukuba, Ibaraki, 305, Japan  
 SOURCE: Synthesis (1983), (5), 409-10  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 99:70667  
 GRAPHIC IMAGE:



ABSTRACT:

Cyclization of carbodiimides  $RN:C:NR$  ( $R = Ph, p\text{-tolyl}$ ) with  $\alpha, \beta$ -unsatd.  $\beta$ -amino ketones  $R_1C(NH_2):CHCOR_2$  ( $R_1 = Me, Ph$ ;  $R_2 = Me, Pr, Ph, p\text{-ClC}_6H_4$ ) gave 36-92% title compds. I.

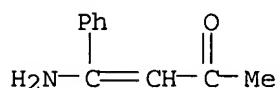
L3 ANSWER 33 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cycloaddn.-cyclocondensation of, with aryl isocyanates and isothiocyanates)

RN 14088-41-6 CAPLUS

CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1983:198136 CAPLUS

DOCUMENT NUMBER: 98:198136

TITLE: The selective synthesis of unsymmetrical 1-substituted 2(1H)-pyrimidinones and -thiones

AUTHOR(S): Kashima, Choji; Katoh, Akira; Yokota, Yuko; Omote, Yoshimori

CORPORATE SOURCE: Dep. Chem., Univ. Tsukuba, Sakura, 305, Japan

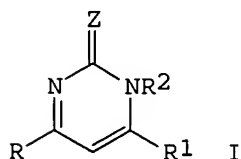
SOURCE: Synthesis (1983), (2), 151-3  
CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 98:198136

GRAPHIC IMAGE:

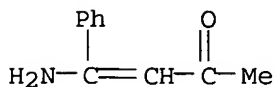


ABSTRACT:

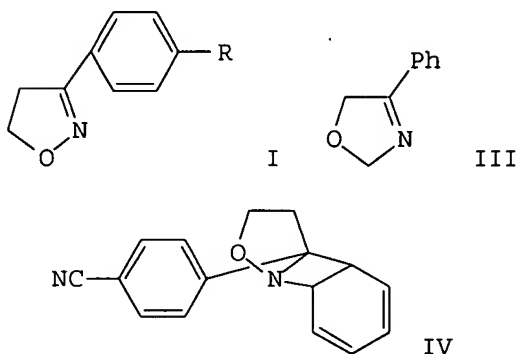
The reaction of  $RC(NH_2):CHCOR_1$  ( $R = Me, Et, Ph$ ;  $R_1 = C1\text{-}3$  alkyl,  $Ph$ ) with  $R_2N:C:Z$  ( $R_2 = Ph, 4\text{-ClC}_6H_4, Et$ ;  $Z = O, S$ ) and  $NaH$  yielded pyrimidines I. Thus,  $MeC(NH_2):CHCOEt$  was treated with  $PhNCO$  and  $NaH$  in  $DMF$  at room temperature to give I ( $R = Me, R_1 = Et, R_2 = Ph, Z = O$ ). Ketone  $MeC(NH_2):CHCOMe$  and  $PhNCS$  gave  $MeC(NH_2):C(CSNHPh)COMe$  and only a small amount of I ( $R = R_1 = Me, R_2 = Ph, Z = S$ ).

L3 ANSWER 34 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 14088-41-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)

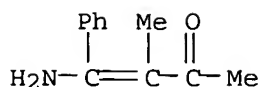


ACCESSION NUMBER: 1982:84853 CAPLUS  
 DOCUMENT NUMBER: 96:84853  
 TITLE: Organic photochemistry. Part 50. Photochemistry of  
 3-aryl-2-isoxazoline  
 AUTHOR(S): Kumagai, T.; Shimizu, K.; Kawamura, Y.; Mukai, T.  
 CORPORATE SOURCE: Dep. Chem., Tohoku Univ., Sendai, 980, Japan  
 SOURCE: Tetrahedron (1981), 37(19), 3365-76  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 96:84853  
 GRAPHIC IMAGE:



ABSTRACT:  
 Irradiation of the isoxazoline I (R = H) (II) in C<sub>6</sub>H<sub>6</sub> for 12 h gave oxazoline III, PhC(:NH)CH<sub>2</sub>CHO, and PhCN in 5, 62, and 24% yield, resp. Analogous products were obtained on irradiation of I (R = Me, MeO, CN, Cl) and of 3-(2-thienyl)-2-isoxazoline. The mechanisms of these reactions involve N-O bond cleavage of the  $\pi$ - $\pi^*$  singlet excited state of II. The absorption and emission spectra of II and of the related compds. 2-phenyl-1-pyrrolidine, 4-phenyl-3-oxazoline, and 2-phenyl-2-oxazoline were recorded and discussed. I (R = CN) formed the 1:1 photoadduct IV with C<sub>6</sub>H<sub>6</sub>.

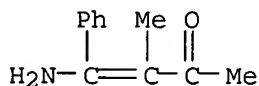
L3 ANSWER 35 OF 47 CAPLUS . COPYRIGHT 2005 ACS on STN  
 IT 78052-25-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, with disulfur dichloride)  
 RN 78052-25-2 CAPLUS  
 CN 3-Buten-2-one, 4-amino-3-methyl-4-phenyl- (9CI) (CA INDEX NAME)



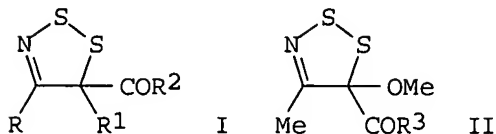
ACCESSION NUMBER: 1982:68907 CAPLUS  
 DOCUMENT NUMBER: 96:68907  
 TITLE: Reactions of ketone hydrazones and  $\beta$ -keto enamines with disulfur dichloride. New synthesis of thioketones and 5H-1,2,3-dithiazoles  
 AUTHOR(S): Okazaki, Renji; Inoue, Kaoru; Inamoto, Naoki  
 CORPORATE SOURCE: Fac. Sci., Univ. Tokyo, Tokyo, 113, Japan  
 SOURCE: Bulletin of the Chemical Society of Japan (1981), 54(11), 3541-5  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT:

Treating ketone hydrazones with  $\text{S}_2\text{Cl}_2$  in the presence of  $\text{NEt}_3$  gave thioketones in good yields, probably via sulfinylamines  $\text{R}_2\text{C}:\text{NN}:\text{S}:\text{S}$  and S-thioxothioketones  $\text{R}_2\text{C}:\text{S}:\text{S}$ . The formation of di-tert-Bu and di-1-adamantyl thioketones even at low temps. suggests that steric congestion alone does not stabilize the S-thioxothioketones. Treating  $\beta$ -ketoenamines with  $\text{S}_2\text{Cl}_2$  gives 5H-1,2,3-dithiazoles via intramol. cyclization of intermediary N-thiosulfinylamines.

L3 ANSWER 36 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 78052-25-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization of, with disulfur dichloride, dithiazole derivative from)  
 RN 78052-25-2 CAPLUS  
 CN 3-Buten-2-one, 4-amino-3-methyl-4-phenyl- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1981:424930 CAPLUS  
 DOCUMENT NUMBER: 95:24930  
 TITLE: Synthesis of 5H-1,2,3-dithiazole, a novel heterocycle  
 AUTHOR(S): Okazaki, Renji; Inoue, Kaoru; Inamoto, Naoki  
 CORPORATE SOURCE: Fac. Sci., Univ. Tokyo, Tokyo, 113, Japan  
 SOURCE: Heterocycles (1981), 15(2), 803-6  
 CODEN: HTCYAM; ISSN: 0385-5414  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GRAPHIC IMAGE:



ABSTRACT:  
 The dithiazoles I [R = R1 = R2 = Me, RR1 = (CH2)4, R2 = EtO; R = Ph, R1 = R2 = Me] were prepared by reaction of  $\text{S}_2\text{Cl}_2$  with  $\text{H}_2\text{NCR}:\text{CR}_1\text{COR}_2$ .  $\text{H}_2\text{NCMe}:\text{CHCOR}_3$  (R3 =

Me, EtO) reacted with S<sub>2</sub>Cl<sub>2</sub> in MeOH containing Et<sub>3</sub>N to give the dithiazoles II.

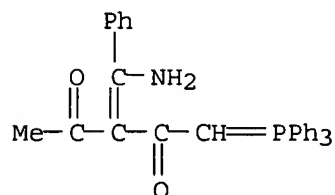
L3 ANSWER 37 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

IT 58752-17-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and Wittig reaction of)

RN 58752-17-3 CAPLUS

CN 2,4-Pentanedione, 3-(aminophenylmethylene)-1-(triphenylphosphoranylidene)-  
(9CI) (CA INDEX NAME)

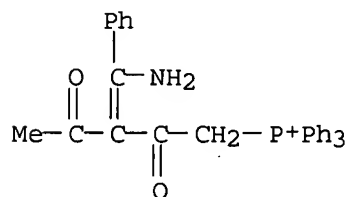


IT 58752-12-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and dehydrobromination of)

RN 58752-12-8 CAPLUS

CN Phosphonium, [3-(aminophenylmethylene)-2,4-dioxopentyl]triphenyl-, bromide  
(9CI) (CA INDEX NAME)



● Br<sup>-</sup>

ACCESSION NUMBER: 1976:105690 CAPLUS

DOCUMENT NUMBER: 84:105690

TITLE: New  $\alpha,\gamma$ -dicarbonyl- $\gamma'$ -enamino-substituted methylenephosphoranes.  
 $\alpha,\gamma,\gamma'$ -Tricarbonyl olefins

AUTHOR(S): Bravo, Pierfrancesco; Ticozzi, Calimero

CORPORATE SOURCE: Ist. Chim., Politech. Milano, Milan, Italy

SOURCE: Chemistry & Industry (London, United Kingdom) (1975),  
(23), 1018-19

CODEN: CHINAG; ISSN: 0009-3068

DOCUMENT TYPE: Journal

LANGUAGE: English

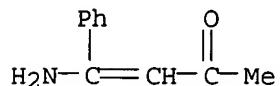
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:

Bromination of isoxazoles (I, R = H, R<sub>1</sub> = Me, Et, Ph; R = Me, R<sub>1</sub> = Me, Ph) gave the 4-bromoacetyl derivative which reacted with Ph<sub>3</sub>P in C<sub>6</sub>H<sub>6</sub> to give 80-95% of the corresponding phosphonium salt which underwent ring cleavage by H/Raney Ni, giving H<sub>2</sub>NCR<sub>1</sub>:C(COR)COCH<sub>2</sub>P<sup>+</sup>Ph<sub>3</sub>.Br<sup>-</sup> which was dehydrobrominated by BuLi or aqueous NaOH-EtOH to the ylide H<sub>2</sub>NCR<sub>1</sub>:C(COR)COCH:PPh<sub>3</sub> (II). Reaction of II with p-R<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CHO (R<sub>2</sub> = H, OMe, NO<sub>2</sub>) gave 80-90% H<sub>2</sub>NCR<sub>1</sub>:(CHO)COCH:CHC<sub>6</sub>H<sub>4</sub>R<sub>2</sub>-p which

were hydrolyzed in aqueous HCl to olefins R1COCH(CHO)COCH:CHC6H4R2-p.

L3 ANSWER 38 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT **14088-41-6P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1975:409870 CAPLUS  
DOCUMENT NUMBER: 83:9870  
TITLE: Isoxazolylmethylenedimethylsulfonium ylids  
AUTHOR(S): Bravo, Pierfrancesco; Gaviraghi, Giovanni  
CORPORATE SOURCE: Ist. Chim., Politec. Milan, Milan, Italy  
SOURCE: Gazzetta Chimica Italiana (1974), 104(11-12), 1307-9  
CODEN: GCITA9; ISSN: 0016-5603

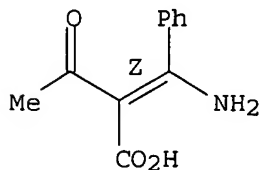
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 83:9870  
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:

The reaction of ylide I (R = H) (II) with R1R2CO gave epoxyalkylisoxazoles III (X = O, R1 = H, R2 = Ph, p-tolyl, p-anisyl, p-ClC6H4; R1 = R2 = Ph). The acylation of II with BzCl gave I (R = Bz). The Michael addition of BzCH:CHPh to II gave cyclopropylisoxazole III (X = PhCH, R1 = H, R2 = Bz).

L3 ANSWER 39 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT **40030-32-8P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 40030-32-8 CAPLUS  
CN Butanoic acid, 2-(aminophenylmethylene)-3-oxo-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



ACCESSION NUMBER: 1973:97531 CAPLUS  
DOCUMENT NUMBER: 78:97531  
TITLE: Hydrogenation of 2-isoxazolin-5-ones  
AUTHOR(S): Mueller, Werner; Kraatz, Udo; Korte, Friedhelm  
CORPORATE SOURCE: Org.-Chem. Inst., Univ. Bonn, Bonn, Fed. Rep. Ger.  
SOURCE: Chemische Berichte (1973), 106(1), 332-8  
CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal  
LANGUAGE: German  
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

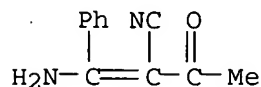
ABSTRACT:

Hydrogenation of the title compds. (I, R = Me or Ph; R1 = H or Et; II, R2, R3 =



H or Me; and III, R2 = Me or Ph) over Pd-C gave Ph(H2N)C:C(COR)CO2H. Hydrogenation of II gave the diazepines IV. Similarly, III (R2 = Ph) and III (R2 = Me) gave the pyrazole derivs. V and VI, resp.

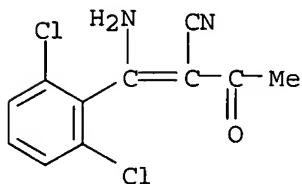
L3 ANSWER 40 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 33831-49-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 33831-49-1 CAPLUS  
 CN Butanenitrile, 2-(aminophenylmethylene)-3-oxo- (9CI) (CA INDEX NAME)



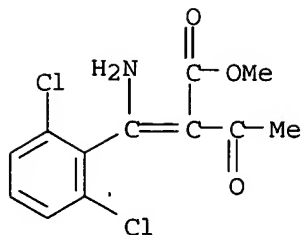
ACCESSION NUMBER: 1971:529619 CAPLUS  
 DOCUMENT NUMBER: 75:129619  
 TITLE: Ketene and its derivatives. XLIII. Reaction of primary enamines with ketene and diketene  
 AUTHOR(S): Kato, Tetsuzo; Yamanaka, Hiroshi; Hozumi, Toyoharu  
 CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan  
 SOURCE: Yakugaku Zasshi (1971), 91(7), 740-9  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese  
 GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:  
 Reaction of primary enamines, such as 3-amino-crotononitrile (I),  $\beta$ -aminocinnamionitrile (II), 4-amino-3-penten-2-one (III), and ethyl $\beta$ -aminocinnamate (IV), with ketene resulted in acylation of the enamine-C to give C-acetates or C,N-diacetates. Acetylation of I-IV with Ac2O gave the N-acetates, whose reaction with ketene did not afford C,N-diacetates. I-IV reacted with diketene and the enamine-C and N were both acylated, giving 2,3-disubstituted 6-methyl-4-pyridinols (e.g. V), N-acetoacetate, and 2,6-dimethyl-4-oxopyran-3-carboxamide derivs. (e.g. VI). Similar results were obtained with other enamines, e.g. ethyl 3-aminocrotonate, 3-amino-2-cyclohexen-1-one, and 3-amino-5,5-dimethyl-2-cyclohexen-1-one.

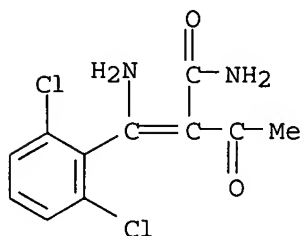
L3 ANSWER 41 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 21486-59-9P 21486-61-3P 21486-62-4P  
 23706-89-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 21486-59-9 CAPLUS  
 CN Cinnamionitrile,  $\alpha$ -acetyl- $\beta$ -amino-2,6-dichloro- (8CI) (CA INDEX NAME)



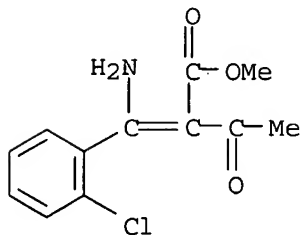
RN 21486-61-3 CAPLUS  
 CN Cinnamic acid,  $\alpha$ -acetyl- $\beta$ -amino-2,6-dichloro-, methyl ester (8CI) (CA INDEX NAME)



RN 21486-62-4 CAPLUS  
 CN Cinnamamide, α-acetyl-β-amino-2,6-dichloro- (8CI) (CA INDEX NAME)



RN 23706-89-0 CAPLUS  
 CN Cinnamic acid, α-acetyl-β-amino-o-chloro-, methyl ester (8CI) (CA INDEX NAME)



ACCESSION NUMBER: 1969:501850 CAPLUS  
 DOCUMENT NUMBER: 71:101850  
 TITLE: Isothiazoles  
 INVENTOR(S): Cheney, Lee C.; Crast, Leonard B., Jr.  
 PATENT ASSIGNEE(S): Bristol-Myers Co.  
 SOURCE: Fr., 12 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1535810		19680809		
DE 1670249			DE	
GB 1174841			GB	
PRIORITY APPLN. INFO.:			US	19660725

GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

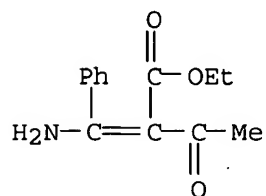
ABSTRACT:  
 The title compds. (I), useful as intermediates for synthetic penicillins, are prepared Thus, a mixture of 200 g. Me 3-(2,6-dichlorophenyl)-5-methylisoxazole-4-

carboxylate, 50 g. Raney Ni, and 1.1 l. MeOH was hydrogenated 12 hrs. with 3.5 atmospheric H to yield 59.6% 1-amino-2-carbomethoxy-1-(2,6-dichlorophenyl)-1-buten-3-one (II), m. 155-6° (PhMe). To 110 g. II in 500 ml. C<sub>6</sub>H<sub>6</sub> was added 160 g. PCl<sub>5</sub> with stirring, the mixture stirred 3 hrs. at room temperature, worked up, the product dissolved in 100 ml. C<sub>6</sub>H<sub>6</sub>, the mixture added at 5-10° to 100 g. NaSH.xH<sub>2</sub>O in 1 l. dry MeOH, H<sub>2</sub>S is bubbled through 1 hr., the mixture is stirred 16 hrs. at room temperature, and worked up to yield an oil which is dissolved in 250 ml. CH<sub>2</sub>Cl<sub>2</sub>. To this solution is added with stirring 62.4 g. K<sub>2</sub>CO<sub>3</sub> and a solution of 96.14 g. iodine in 2.5 l. CH<sub>2</sub>Cl<sub>2</sub> is added in 45 min. at room temperature; stirring is continued 30 min. and the mixture is worked up to yield a residue which is saponified by refluxing 1 hr. with a solution of 32 g. NaOH in 400 ml. 50% aqueous MeOH to yield I (R = 2,6-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, R<sub>1</sub> = Me) (III), m. 215-17°. Also prepared are 1-amino-2-carbethoxy-1-phenyl-1-buten-3-one, m. 76-7° (PhMe), and I (R = Ph, R<sub>1</sub> = Me) (IV), m. 154-4.5°. A mixture of 3.2 g. IV and 5 ml. SOCl<sub>2</sub> is heated 1 hr. at 70-80° to yield 95% of the acid chloride, b.p. 122-5°, which is dissolved in 5 ml. CH<sub>2</sub>Cl<sub>2</sub> and added in 2 min. with stirring at 5-10° to a solution of 3 g. 6-aminopenicillanic acid and 3 g. Et<sub>3</sub>N in 50 ml. CH<sub>2</sub>Cl<sub>2</sub>; the mixture is stirred 1 hr. at 15° to yield 39% Na-6-(5-methyl-3-phenylisothiazole-4-carboxamido)penicillanate H<sub>2</sub>O (V), m. 184-90° (decomposition). A solution of 175 g. 3-(2-chlorophenyl)-5-methyl-4-isoxazolecarboxylic acid chloride in 1 l. MeOH is refluxed 5 hrs. to yield 78.8% Me 3-(2-chlorophenyl)-5-methyl-4-isoxazolecarboxylate, m. 58-9° (MeOH), which is converted via 57.5% 1-amino-2-carbomethoxy-1-(2-chlorophenyl)-1-buten-3-one, m. 89-91°, into I (R = 2-ClC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub> = Me), m. 185-7°. A solution of 50 g. 3-(2,6-dichlorophenyl)-5-methyl-4-isoxazolecarboxylic acid chloride in 300 ml. tetrahydrofuran is added to 300 ml. concentrated aqueous NH<sub>4</sub>OH and the mixture is kept 18 hrs. at 25° to yield 61% 4-carbamoyl-3-(2,6-dichlorophenyl)-5-methylisoxazole (VI), m. 166° (EtOH-H<sub>2</sub>O). A mixture of 26 g. VI, 36 ml. Et<sub>3</sub>N, and 200 ml. POCl<sub>3</sub> is refluxed 2 hrs. to yield 80% 4-cyano-3-(2,6-dichlorophenyl)-5-methylisoxazole (VII), m. 99-100° (iso-PrOH-H<sub>2</sub>O). VII is converted as described for III via 1-amino-2-cyano-1-(2,6-dichlorophenyl)-1-buten-3-one, m. 231-2°, into 4-cyano-3-(2,6-dichlorophenyl)-5-methylisothiazole (VIII), m. 125-6°. A mixture of 729.5 mg. VIII, 3.3 ml. ethylene glycol, 0.66 ml. H<sub>2</sub>O and 0.33 g. KOH is refluxed 49 hrs. to yield 86% III. VI is converted as described for II into 1-amino-2-carbamoyl-1-(2,6-dichlorophenyl)-1-buten-3-one, m. 226-8° (iso-PrOH-H<sub>2</sub>O), which is converted into III. To a mixture of 37.8 g. 2,6-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH:NOH and 200 ml. H<sub>2</sub>O is added gradually with stirring at 5-10° 425 ml. aqueous solution containing 0.2 mole NaOCl, the mixture is stirred 0.5 hr. and worked up to yield a residue which is dissolved in 200 ml. anhydrous EtOH. To this solution is added with stirring at 5° 30 g. EtCOCH<sub>2</sub>CO<sub>2</sub>Et and a solution of 1.76 g. NaOH in 40 ml. EtOH to yield 53.5% Et 3-(2,6-dichlorophenyl)-5-ethyl-4-isoxazolecarboxylate, m. 62-3°, which is converted via 83% 1-amino-2-carbethoxy-1-(2,6-dichlorophenyl)-1-penten-3-one, m. 109.5-10.5°, into I (R = 2,6-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, R<sub>1</sub> = Et), m. 206-8°. Also prepared were: 3-(2-chloro-6-fluorophenyl)-5-methyl-4-isoxazolecarboxylic acid, m. 205-6° (EtOH-H<sub>2</sub>O) (Me ester m. 55-6°); I [R = 2,6-Cl(F)C<sub>6</sub>H<sub>3</sub>, R<sub>1</sub> = Me], m. 199-201°; Na 6-[3-(2-chloro-6-fluorophenyl)-5-methyl-4-isothiazolecarboxamido]penicillanate-H<sub>2</sub>O, m. 175-6° (decomposition); and the following I (R<sub>1</sub> = Me) (R given): Me (m. 180-200°); 2,6-dichloro-4-methylphenyl; 2,4,6-Cl<sub>3</sub>C<sub>6</sub>H<sub>2</sub>; 2-chloro-6-fluoro-4-methoxyphenyl; 4-F<sub>3</sub>CC<sub>6</sub>H<sub>4</sub>; 2,6-(F<sub>3</sub>C)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>; 4-MeOC<sub>6</sub>H<sub>4</sub>; and 3-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>. Results of tests against Staphylococcus aureus are given for V; ir and uv data are given for several compds.

(preparation of)

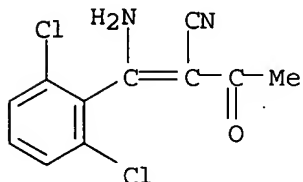
RN 21486-57-7 CAPLUS

CN Cinnamic acid,  $\alpha$ -acetyl- $\beta$ -amino-, ethyl ester (8CI) (CA INDEX NAME)



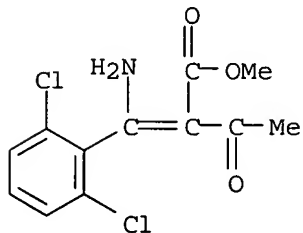
RN 21486-59-9 CAPLUS

CN Cinnamionitrile,  $\alpha$ -acetyl- $\beta$ -amino-2,6-dichloro- (8CI) (CA INDEX NAME)



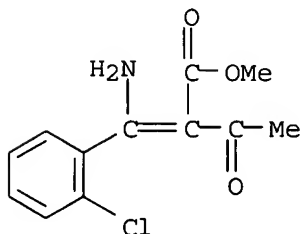
RN 21486-61-3 CAPLUS

CN Cinnamic acid,  $\alpha$ -acetyl- $\beta$ -amino-2,6-dichloro-, methyl ester (8CI) (CA INDEX NAME)



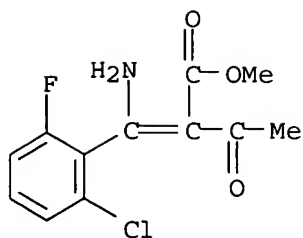
RN 23706-89-0 CAPLUS

CN Cinnamic acid,  $\alpha$ -acetyl- $\beta$ -amino-o-chloro-, methyl ester (8CI) (CA INDEX NAME)



RN 23858-48-2 CAPLUS

CN Cinnamic acid,  $\alpha$ -acetyl- $\beta$ -amino-2-chloro-6-fluoro-, methyl ester (8CI) (CA INDEX NAME)



ACCESSION NUMBER: 1969:461377 CAPLUS  
 DOCUMENT NUMBER: 71:61377  
 TITLE: Antibacterial isothiazole-4-carboxylic acids  
 INVENTOR(S): McGregor, Donald N.; Cheney, Lee C.  
 PATENT ASSIGNEE(S): Bristol-Meyers Co.  
 SOURCE: Fr., 11 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1535809		19680809		
DE 1670248			DE	
GB 1199578			GB	
US 3498995		19700000	US	
PRIORITY APPLN. INFO.:			US	19660725

GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

#### ABSTRACT:

The title compds. (I) or precursors (II), in which R1 can be hydrolyzed to a CO<sub>2</sub>H group to give I, were prepared by the action of P<sub>2</sub>S<sub>5</sub> and an oxidant on RC(NH<sub>2</sub>):CR1COR2 (III) at 75-200°. Hydrogenolysis of 100 g. 4-carbomethoxy-3-(2,6-dichlorophenyl)-5-methylisoxazole (U.S. 2,996,501) on 50 g. Ni in 1.1 l. EtOH gave 59.6% 1-amino-2-carbomethoxy-1-(2,6-dichlorophenyl)-1-buten-3-one (IIIa), m. 155-6.5° (PhMe). Heating IIIa with P<sub>2</sub>S<sub>5</sub> and S, iodine, air, or chloranil gave 4-carbomethoxy-3-(2,6-dichlorophenyl)-5-methylisothiazole (IIa). For example, 2.88 g. IIIa, 6.66 g. P<sub>2</sub>S<sub>5</sub>, and 2.45 g. chloranil in 50 ml. PhMe refluxed 15 min. gave 53% IIa, m. 81-4° (aqueous MeOH), which was saponified to the acid, m. 211-12°. The action of 300 ml. NH<sub>4</sub>OH on 50 g. 3-(2,6-dichlorophenyl)-5-methyl-4-isoxazolecarbonyl chloride in 300 ml. tetrahydrofuran at 25° 18 hrs. gave 61% 4-carbamoyl-3-(2,6-dichlorophenyl)-5-methylisoxazole (IV), m. 166° (aqueous EtOH). Dehydration of 26 g. IV by 200 ml. POCl<sub>3</sub> and 36 ml. Et<sub>3</sub>N gave 80% 4-cyano-3-(2,6-dichlorophenyl)-5-methylisoxazole (V), m. 99-100° (aqueous Me<sub>2</sub>CHOH). Hydrogenolysis of 5 g. V in 100 ml. EtOH on 2 g. Ni gave 2.26 g. 1-amino-2-cyano-1-(2,6-dichlorophenyl)-1-buten-3-one (IIIb), m. 231-2° (n-C<sub>6</sub>H<sub>14</sub>). P<sub>2</sub>S<sub>5</sub> (8 g.), 1.15 g. S, and 3 g. IIIb in 80 ml. PhMe refluxed 3 hrs. gave 33% 4-cyano-3-(2,6-dichlorophenyl)-5-methylisothiazole, m. 120-2° (EtOH). To 37.8 g. 2,6-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH:NOH in 200 ml. H<sub>2</sub>O at 5-10° was added 425 ml. 5.25% NaOCl. The precipitate of 2,6-dichlorobenzonitrile oxide in 200 ml. absolute EtOH was treated at 5° with 30 g. EtCOCH<sub>2</sub>CO<sub>2</sub>Et, then with 1.76 g. NaOH in 40 ml. EtOH to give 53.5% 4-carbomethoxy-3-(2,6-dichlorophenyl)-5-ethylisoxazole (VI), m. 62-3° (Skellysolve B). Hydrogenolysis of 31.8 g. VI gave 83% 1-amino-2-carbomethoxy-1-(2,6-dichlorophenyl)-1-penten-3-one (IIIc), m. 109.5-11.5° (Skellysolve B). IIIc (3.16 g.), 6.65 g. P<sub>2</sub>S<sub>5</sub>, and 0.96 g. S in 80 ml. PhMe gave 1.37 g. 4-carbomethoxy-3-(2,6-dichlorophenyl)-5-ethylisoxazole, oil, which was hydrolyzed to 59% 3-(2,6-dichlorophenyl)-5-ethyl-4-isothiazolecarboxylic acid, m. 206-8° (PhMe). 6-Aminopenicillanic acid was acylated by the acid chloride of this product to give 63.5% Na 6-[3-(2,6-dichlorophenyl)-5-ethyl-4-isothiazole-carboxamidolpenicillanate. Other compds. prepared were: 52 g. 3-(2-chloro-6-fluorophenyl)-5-methyl-4-isoxazolecarboxylic acid, m.

205-6° (aqueous MeOH), from 52 g. 2-chloro-6-fluorobenzaldoxime; 37 g. 4-carbomethoxy-3-(2-chloro-6-fluorophenyl)-5-methylisoxazole, m. 55-6° (cyclohexane), from 51 g. acid, via the acid chloride, 1-amino-2-carbomethoxy-1-(2-chloro-6-fluorophenyl)-1-buten-3-one, and 3-(2-chloro-6-fluorophenyl)-5-methyl-4-isothiazolecarboxylic acid, m. 199-201° (1:1 EtOH-H<sub>2</sub>O); 57.5% 1-amino-2-carbomethoxy - 1 - (2 - chlorophenyl) - 1-buten-3-one, m. 89-91° (cyclohexane), from 25.2 g. 4-carbomethoxy-3-(2-chlorophenyl)-5-methylisoxazole, and 3-(2-chlorophenyl)-5 - methyl - 4 - isothiazolecarboxylic acid, m. 187-8° (PhMe); 1-amino-2-carbomethoxy-1 - phenyl - 1 - buten - 3 - one, m. 76-7° (PhMe), and 5-methyl-3-phenyl-4-isothiazolecarboxylic acid, m. 154-4.5°; and 3,5-dimethyl-4-isothiazolecarboxylic acid, sublimes 180-200°.

L3 ANSWER 43 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN

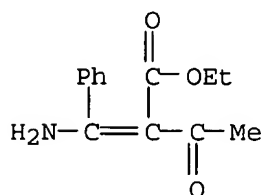
IT 21486-57-7P 21486-58-8P 21486-59-9P

21486-60-2P 21486-61-3P 21486-62-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

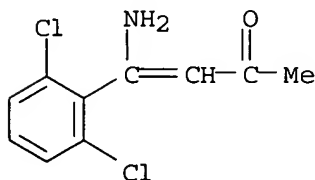
RN 21486-57-7 CAPLUS

CN Cinnamic acid, α-acetyl-β-amino-, ethyl ester (8CI) (CA INDEX NAME)



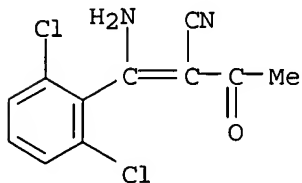
RN 21486-58-8 CAPLUS

CN 3-Buten-2-one, 4-amino-4-(2,6-dichlorophenyl)- (8CI) (CA INDEX NAME)



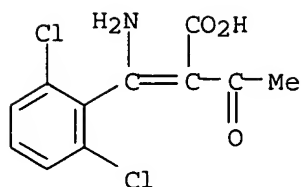
RN 21486-59-9 CAPLUS

CN Cinnamionitrile, α-acetyl-β-amino-2,6-dichloro- (8CI) (CA INDEX NAME)

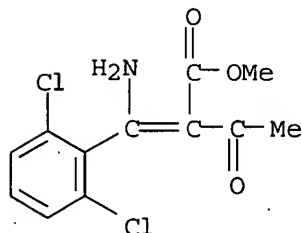


RN 21486-60-2 CAPLUS

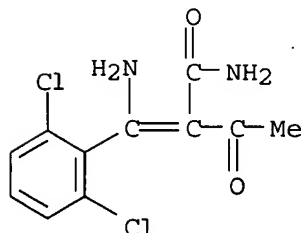
CN Cinnamic acid, α-acetyl-β-amino-2,6-dichloro- (8CI) (CA INDEX NAME)



RN 21486-61-3 CAPLUS  
 CN Cinnamic acid, α-acetyl-β-amino-2,6-dichloro-, methyl ester  
 (8CI) (CA INDEX NAME)



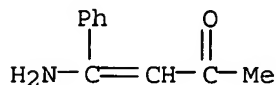
RN 21486-62-4 CAPLUS  
 CN Cinnamamide, α-acetyl-β-amino-2,6-dichloro- (8CI) (CA INDEX NAME)



ACCESSION NUMBER: 1969:77853 CAPLUS  
 DOCUMENT NUMBER: 70:77853  
 TITLE: Synthesis of isothiazoles. Transformation of isoxazoles into isothiazoles  
 AUTHOR(S): McGregor, Donald N.; Corbin, U.; Swigor, J. E.; Cheney, Lee C.  
 CORPORATE SOURCE: Bristol Lab. Div., Bristol-Myers Co., Syracuse, NY, USA  
 SOURCE: Tetrahedron (1969), 25(2), 389-95  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 70:77853  
 ABSTRACT:

A method was devised whereby 3-(R-substituted)-4-(R1-substituted)-5-(R2-substituted)isoxazoles can be efficiently converted to 3-(R-substituted)-4-(R1-substituted)-5-(R2-substituted) isothiazoles. The isoxazole ring is opened by reduction with Raney Ni, and the resulting enamino ketone H2NCR:CR1COR2 is treated with P2S5 and chloranil to give the corresponding isothiazole derivative. Thus, by taking advantage of the relatively numerous and reliable routes available for the preparation of variously substituted isoxazoles, it is possible to obtain readily many isothiazole derivs. which were previously available only with great difficulty.

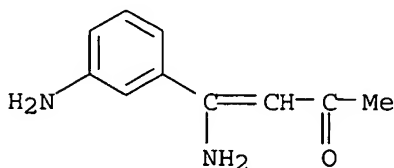
L3 ANSWER 44 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 14088-41-6  
 RL: PRP (Properties)  
 (conformation of, calcn. of)  
 RN 14088-41-6 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1967:24254 CAPLUS  
 DOCUMENT NUMBER: 66:24254  
 TITLE: Chemical exchange processes [examined] by means of  
 nuclear magnetic resonance  
 AUTHOR(S): Bhar, B. N.; Daehne, Siegfried; Klose, Gotthard;  
 Ranft, Johannes  
 SOURCE: Wissenschaftliche Zeitschrift der Humboldt-  
 Universitaet zu Berlin, Mathematisch-  
 Naturwissenschaftliche Reihe (1965), 14(4), 871-5  
 CODEN: WZHMAE; ISSN: 0522-9863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:  
 Exchange of the type shown was studied for 2,5-bis(dimethylamino)benzoquinone (I) and 2,5-bis(1-pyrrolidinyl)benzoquinone. For I:  $\Delta E = 18.5 \pm 4$  kcal./mole,  $k_0 = 1.1 + 10^{19}$ , and for II:  $\Delta E = 10.0 \pm 3.0$  kcal./mole,  $k_0 = 1.3 + 10^9$  were obtained. The N.M.R. spectra for MeC(NH<sub>2</sub>):CHCOME indicate a barrier of  $6 \pm 3$  kcal./mole for internal rotation about the C-N bond. A study of the spectrum of 2-pyridylmethyl Ph ketone indicated that exchange between several forms takes place, probably involving structures such as III and IV.

L3 ANSWER 45 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
 IT 91842-83-0, 3-Buten-2-one, 4-amino-4-(m-aminophenyl)-  
 (preparation of)  
 RN 91842-83-0 CAPLUS  
 CN 3-Buten-2-one, 4-amino-4-(m-aminophenyl)- (7CI) (CA INDEX NAME)



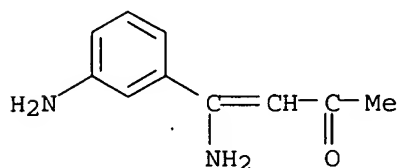
ACCESSION NUMBER: 1964:30882 CAPLUS  
 DOCUMENT NUMBER: 60:30882  
 ORIGINAL REFERENCE NO.: 60:5475d-g  
 TITLE: Derivatives of 6-aminopenicillanic acid. VII. Further  
 3,5-disubstituted isoxazole-4-carboxylic acid  
 derivatives  
 AUTHOR(S): Doyle, F. P.; Hanson, J. C.; Long, A. A. W.; Nayler,  
 J. H. C.  
 SOURCE: Journal of the Chemical Society, Abstracts (1963),  
 (Dec.), 5845-54  
 CODEN: JCSAAZ; ISSN: 0590-9791  
 DOCUMENT TYPE: Journal



LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 60:30882  
ABSTRACT:

Further 3,5-disubstituted isoxazole-4-carboxylic acids were prepared as intermediates for the synthesis of penicillins, many of which resisted inactivation by penicillinase.

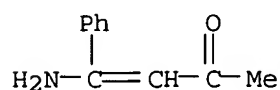
L3 ANSWER 46 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 91842-83-0, 3-Buten-2-one, 4-amino-4-(m-aminophenyl)-  
(preparation of)  
RN 91842-83-0 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-(m-aminophenyl)- (7CI) (CA INDEX NAME)



ACCESSION NUMBER: 1964:30881 CAPLUS  
DOCUMENT NUMBER: 60:30881  
ORIGINAL REFERENCE NO.: 60:5475c-d  
TITLE: Derivatives of 6-aminopenicillanic acid. VI.  
Penicillins from 3- and 5-phenylisoxazole-4-carboxylic acids and their alkyl and halogen derivatives  
AUTHOR(S): Doyle, F. P.; Hanson, J. C.; Long, A. A. W.; Nayler, J. H. C.; Stove, E. R.  
SOURCE: Journal of the Chemical Society, Abstracts (1963), (Dec.), 5838-45  
CODEN: JCSAAZ; ISSN: 0590-9791  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

ABSTRACT:  
cf. CA 58, 6816f. Condensation of benzohydroxamoyl chloride or its Me or halogen derivs. with the Na derivs. of acylacetic esters gave a series of 3-arylisoxazole-4-carboxylic acids.. The 5-aryl analogs were prepd, from  $\alpha$ -alkanoyl- $\alpha$ -aroylacetic esters and  $\text{NH}_2\text{OH}$ . The 3- and 5-aryl acids were differentiated by means of their ultraviolet spectra. Reaction of the isoxazole acid chlorides with 6-aminopenicillanic acid gave isoxazolympenicillins (I) with useful antibacterial activity.

L3 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2005 ACS on STN  
IT 14088-41-6, 3-Buten-2-one, 4-amino-4-phenyl-  
(stereoisomers)  
RN 14088-41-6 CAPLUS  
CN 3-Buten-2-one, 4-amino-4-phenyl- (8CI, 9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1955:4657 CAPLUS  
DOCUMENT NUMBER: 49:4657  
ORIGINAL REFERENCE NO.: 49:942i, 943a-h  
TITLE: Structure and Grignard reaction of 3-aminocrotononitrile

AUTHOR(S): Conn, Jasper J.; Taurins, Alfred  
CORPORATE SOURCE: McGill Univ., Montreal, Can.  
SOURCE: Canadian Journal of Chemistry (1953), 31, 1211-22  
CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 49:4657  
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.  
ABSTRACT:

The object of this work is to study the properties of  $\text{MeC}(\text{NH}_2):\text{CHCN}$  (I) in order to elucidate the nature of the high- (III) and low-melting (IV) forms and to prepare  $\beta$ -amino ketones by the action of Grignard reagents on I. A new mechanism for the formation of I, involving free-radical intermediates, is proposed. The preparation of the 2 modifications of I involves decomposition of the Na salt of I at different temps. IV is obtained if the salt is decomposed at  $30^\circ$  whereas III is prepared with ice-cold  $\text{H}_2\text{O}$ . In both cases I is extracted with  $\text{Et}_2\text{O}$  and recrystd. from  $\text{C}_6\text{H}_6$ . Ultraviolet absorption spectra for IV:  $\lambda_{\text{max. EtOH}}$  258  $\text{m}\mu$  ( $\epsilon$  13600) and  $\lambda_{\text{max. MeCN}}$  254.5  $\text{m}\mu$  ( $\epsilon$  12430). For III:  $\lambda_{\text{max. EtOH}}$  256  $\text{m}\mu$  ( $\epsilon$  14700) and  $\lambda_{\text{max. MeCN}}$  254.5  $\text{m}\mu$  ( $\epsilon$  13650). Thus III and IV have identical electronic configurations in polar solvents and hence the existence of tautomeric forms of I are excluded. The spectra are in accordance with the enamine structure of I, which can exist as a resonance hybrid of 3 resonating structures. A determination of the heats of solution of III and IV shows identical values, hence it is safe to assume that the heats of melting of III and IV will be of the same order of magnitude and are almost identical. This conclusion serves to confirm the enamine structure of I. The existence of polymorphic modifications of I is excluded on the basis of its thermochem. behavior. It is proposed that these modifications are cis and trans isomers, IV being the cis form, III the trans form. In IV the  $\text{NH}_2$  and  $\text{CN}$  groups are in adjacent positions and can form an internal H bond (V) which makes the cis more stable than the trans isomer. I (10 g.) in 100 ml.  $\text{Et}_2\text{O}$  refluxed with 0.5 mole  $\text{PhMgBr}$  in 300 ml.  $\text{Et}_2\text{O}$  gives 5 g. (20%)  $\text{H}_2\text{NCPH:CHAc}$  (VI), b1  $70-80^\circ$ ; 2,4-dinitrophenylhydrazone, orange needles, m.  $241-2^\circ$ . VI (0.5 g.), 0.5 g.  $\text{NH}_2\text{OH.HCl}$ , and 2 g.  $\text{KOH}$  in 5 ml.  $\text{H}_2\text{O}$  refluxed 2 hrs. give 3-methyl-5-phenylisoxazole (VII), white needles from  $\text{EtOH}$ , m.  $67^\circ$ . The formation of VII is proof of the structure of VI.  $\text{BzCH}_2\text{Ac}$  (VIII), m.  $60-1^\circ$ , is obtained in 5% yield if, after the decomposition of the Grignard complex and extraction with  $\text{Et}_2\text{O}$ , the alkaline aqueous solution is neutralized with  $\text{HCl}$  and cooled. VIII is obtained in 10% yield if the  $\text{Et}_2\text{O}$  solution of the decomposed Grignard complex is repeatedly extracted with saturated  $\text{NaHCO}_3$  solution and the bicarbonate solution acidified with  $\text{HCl}$ . It is evident that VIII is formed by hydrolysis of VI. VIII with  $\text{NH}_2\text{OH.HCl}$  yields VII. I (10 g.) and 0.5 mole  $1\text{-ClO}_2\text{H}_7\text{MgBr}$  similarly give 6.5 g. (25.2%)  $1\text{-ClO}_2\text{H}_7\text{C}(\text{NH}_2):\text{CHAc}$  (IX), b1  $130-5^\circ$ ; 2,4-dinitrophenylhydrazone, fine orange needles, m.  $216-17^\circ$ ; semicarbazone, white plates, m.  $213-14^\circ$ . IX with  $\text{NH}_2\text{OH.HCl}$  gives 3-methyl-5-(1-naphthyl)isoxazole, white plates, m.  $140-1^\circ$ . The  $\text{Et}_2\text{O}$  extract of the decomposed Grignard complex extracted with  $\text{NaHCO}_3$  and neutralized with  $\text{HCl}$  gives 1.5 g. (5.8%)  $1\text{-ClO}_2\text{H}_7\text{COCH}_2\text{Ac}$  (X), fine prisms, m.  $107-8^\circ$ . I and  $o\text{-MeC}_6\text{H}_4\text{MgBr}$  (XI) give 11%  $o\text{-MeC}_6\text{H}_4\text{C}(\text{NH}_2):\text{CHAc}$  (XII), yellow oil, b4  $40-50^\circ$ ; 2,4-dinitrophenylhydrazone, orange needles, m.  $162-3^\circ$ . I and  $p\text{-MeC}_6\text{H}_4\text{MgBr}$  give 11-15%  $p\text{-MeC}_6\text{H}_4\text{C}(\text{NH}_2):\text{CHAc}$  (XIII), yellow oil, b4  $30-40^\circ$ ; 2,4-dinitrophenylhydrazone, fine red needles from  $\text{C}_6\text{H}_6$ , m.  $259-60^\circ$ . I and  $\text{PhCH}_2\text{MgBr}$  give 16%  $\text{PhC}(\text{NH}_2):\text{CHAc}$  (XIV), yellow oil, b1  $70-5^\circ$  (2,4-dinitrophenylhydrazone, orange needles, m.  $146-7^\circ$ ). As further proof of the position of the  $\text{C:O}$  group in VI, 19.2 g.  $\text{Me}(\text{PhNH})\text{C:CHCN}$  (XV) treated 48 hrs. with 0.75 mole  $\text{PhMgBr}$  in 400 ml.  $\text{Et}_2\text{O}$  gives 6.5 g. (12%)  $\text{H}_2\text{NCPH:CHC}(\text{NPh})\text{Me}$  (XVI), yellow crystals, m.  $85-6^\circ$ . XVI on acid hydrolysis with 75%  $\text{H}_2\text{SO}_4$  1 hr. at  $150-60^\circ$  gives VI, identified as the 2,4-dinitrophenylhydrazone. The reaction of  $\beta$ -amino nitriles with Grignard reagents is extended to include  $\text{H}_2\text{NCeEt:CMeCN}$  (XVII). XVII (20.7 g.) and 0.6 mole  $\text{PhMgBr}$  in 400 ml.  $\text{Et}_2\text{O}$  give

5.2 g. (15%) H<sub>2</sub>NPh:CM<sub>2</sub>COEt, light oil, b<sub>8</sub> 80-90°; 2,4-dinitrophenylhydrazone, bright orange needles, m. 230-1°.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

251.14

412.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-36.50

-36.50

STN INTERNATIONAL LOGOFF AT 13:42:09 ON 26 JUN 2005